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Employee relationship planning (ERP II)

Gunasegaran, Arumugam

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EMPLOYEE RELATIONSHIP PLANNING (ERP II)

By

ARUMUGAM GUNASEGARAN

January 2009



The work contained within this document has been submitted
by the student in partial fulfilment of the requirement of their course and award

Abstract

By triangulation of three longitudinal case studies with change leader practitioner survey, this research identified the following seven generative Employee Relationship Planning (ERP II) management strategies:

1. People Strategy
2. Capital Strategy
3. Information Strategy
4. Experience Strategy
5. Opportunity Strategy
6. Crisis Strategy
7. Result / Reward Strategy

ERP II management strategies may facilitate development of organisational cultures where management enables **employees** to become aware of relevant **capital, information, experience, opportunity** and **crisis** situations to attain the **result/reward** of their collaboration and participation in business process reengineering activities for continuous improvements.

These ERP II management strategies may facilitate practical application of current approaches in positive leadership, Emotional Intelligence, Spiritual Intelligence, Appreciative Inquiry and Kaizen.

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Glossary of Terms

Action Research

An inquiry or research into personal growth, professional development and social change. [1]

Agile Development

There are many agile development methods. Most promote development, teamwork, collaboration and process adaptability throughout life-cycle of the project. [2]

Agile Methodology

An approach to project management, typically used in software development. It helps teams respond to unpredictability of building software through incremental, iterative work cadences, known as sprints. [3]

Appreciative Inquiry (AI)

The cooperative search for the best in people, their organisations and the world around them. It involves systematic discovery of what gives a system “life” when the system is most effective and capable in economic, ecological and human terms. [4]

Business Process Management (BPM)

A management approach focused on aligning all aspects of an organization with the wants and needs of clients. It is a holistic management approach that promotes business effectiveness and efficiency while striving for innovation, flexibility and integration with technology. Business process management attempts to improve processes continuously. It could therefore be described as a "process optimization process." It is argued that BPM enables organizations to be more efficient, more effective and more capable of change than a functionally focused, traditional hierarchical management approach. [5]

Business Process Reengineering (BPR)

Business Process Reengineering is the key to transforming how people work. What appear to be minor changes in processes can have dramatic effects on cash flow, service delivery and customer satisfaction. [6]

Case Study

A research methodology that is common in social science. It is based on an in-depth investigation of an individual, group, or event to explore causation in order to find underlying principles. Rather than using samples and following a rigid protocol (strict set of rules) to examine limited number of variables, case study methods involve an in-depth, longitudinal (over a long period of time) examination of a single instance or event: a case. They provide a systematic way of looking at events, collecting data, analyzing information, and reporting the results. As a result the researcher may gain a sharpened understanding of why the instance happened as it did, and what might become important to look at more extensively in future research. Case studies lend themselves to both generating and testing hypotheses. [7]

Change Management

A structured approach to transitioning individuals, teams, and organizations from a current state to a desired future state. Change management (or change control) is the process during which the changes to a system are implemented in a controlled manner by following a pre-defined framework/model with, to some extent, reasonable modifications. The field of change management grew from the recognition that organizations are composed of people. And the behaviors of people make up the outputs of an organization. [8]

Collaboration

A recursive process where two or more people or organizations work together in an intersection of common goals — for example, an intellectual endeavor that is creative in nature—by sharing knowledge, learning and building consensus. Most collaboration requires leadership, although the form of leadership can be social within a decentralized and egalitarian group. In particular, teams that work collaboratively can obtain greater resources, recognition and reward when facing competition for finite resources. [9]

Customer Relationship Management (CRM)

A broadly recognized, widely-implemented strategy for managing and nurturing a company's interactions with clients and sales prospects. It involves using technology to organize, automate, and synchronize business processes—principally sales activities, but also those for marketing, customer service, and technical support. The overall goals are to find, attract, and win new clients, nurture and retain those the company already has, entice former clients back into the fold, and reduce the costs of marketing and client service. Once simply a label for a category of software tools, today, it generally denotes a company-wide business strategy embracing all client-facing departments and even beyond. When an implementation is effective, people, processes and technology work in synergy to increase profitability and reduce operational costs. [10]

Emotional Intelligence (EI)

The ability, capacity, skill or, in the case of the trait EI model, a self-perceived grand ability to identify, assess and manage the emotions of one's self, of others and of groups. Different models have been proposed for the definition of EI and disagreement exists as to how the term should be used. The ability EI and trait EI models (but not the mixed models) enjoy support in the literature and have successful applications in different domains. [11]

Enterprise Resource Planning (ERP)

An integrated computer-based system used to manage internal and external resources including tangible assets, financial resources, materials, and human resources. It is a software architecture whose purpose is to facilitate the flow of information between all business functions inside the boundaries of the organization and manage the connections to outside stakeholders. Built on a centralized database and normally utilizing a common computing platform, ERP systems consolidate all business operations into a uniform and enterprise wide system environment. [12]

Ethnography

A qualitative research method often used in the social sciences, particularly in anthropology and in sociology. It is often employed for gathering empirical data on human societies/cultures. Data collection is often done through participant observation, interviews, questionnaires, etc. Ethnography aims to describe the nature of those who are studied (i.e. to describe a people, an *ethnos*) through writing. In the biological sciences, this type of study might be called a "field study" or a "case report," both of which are used as common synonyms for "ethnography". [13]

Generative Strategies

Generative strategies are learning strategies aimed at helping the learner to integrate presented information with existing knowledge and experience. Some examples of generative strategies are note taking, underlining while reading, repeating aloud, summarizing, etc. Generative strategies are intended to promote deep understanding by prompting the learner to put the material into his or her own words, distill its main message, and relate it with other knowledge. There are two important generative strategies: summarizing and questioning. [14]

Group Thinking

A mode of thinking that people engage in when they are deeply involved in a cohesive in-group, when the members' strivings for unanimity override their motivation to realistically appraise alternative courses of action [15].

In-House Software Development

Application software developed using the organisation's own resources and developers. [60]

Just-In-Time (JIT)

An inventory strategy that strives to improve a business's return on investment by reducing in-process inventory and associated carrying costs. Implemented correctly, JIT can improve a manufacturing organization's return on investment, quality, and efficiency. [16]

Kaizen

The aim of KAIZEN is to increase productivity, speed, quality and profits with minimal cost, time and effort. The concept of KAIZEN is to make simple, common sense improvements and refinements to critical end-to-end business processes to support the overall continuous improvement strategy of the organization. [17]

Kaizen (Japanese for "improvement" or "change for the better") refers to a philosophy or practices that focus upon continuous improvement of processes in manufacturing, engineering, supporting business processes, and management. It has been applied in healthcare, government, banking, and many other industries. When used in the business sense and applied to the workplace, kaizen refers to activities that continually improve all functions, and involves all employees from the CEO to the assembly line workers. It also applies to processes, such as purchasing and logistics that cross organizational boundaries into the supply chain. By improving standardized activities and processes, kaizen aims to eliminate waste. Kaizen was first implemented in several Japanese businesses after the Second [18].

Learning organization

A term given to a company that facilitates the learning of its members and continuously transforms itself. Learning organizations develop as a result of the pressures facing modern organizations and enables them to remain competitive in the business environment. A learning organization has five main features; systems thinking, personal mastery, mental models, shared vision and team learning. [19]

Materials Requirements Planning (MRP)

A production planning and inventory control system used to manage manufacturing processes. Most MRP systems are software-based, while it is possible to conduct MRP by hand as well. An MRP system is intended to simultaneously meet three objectives: Ensure materials and products are available for production and delivery to customers; maintain the lowest possible level of inventory and plan manufacturing activities, delivery schedules and purchasing activities. [20]

Manufacturing Resource Planning (MRP II)

A method for the effective planning of all resources of a manufacturing company. Ideally, it addresses operational planning in units, financial planning in dollars, and has a simulation capability to answer "what-if" questions and extension of closed-loop MRP. This is not exclusively a software function, but a marriage of people skills, dedication to data base accuracy and computer resources. It is a total company management concept for using human resources more productively. [21]

Participant Observation

An approach in research where observation is an integral feature of the research in observing real-life interactions. [22]

Phototropism

Directional growth in which the direction of growth is determined by the direction of the light source. The growth or movement is towards a source of light. [23]

Positive Leadership

Application of positive principles arising from the newly emerging fields of positive organisational scholarship, positive psychology and positive change. Focuses on strategies that provide strengths-based positive energy to individuals and organisations.[24]

Qualitative Data

Data described in terms of some quality or categorization that may be 'informal' or may use relatively ill-defined characteristics such as warmth and flavor. However, qualitative data can include well-defined aspects such as gender, nationality or commodity type. [25]

Quantitative Data

Data that can be measured or identified on a numerical scale. Numerical data can be analyzed using statistical methods and results can be displayed using tables, charts, histograms and graphs. [25]

Reflective practice

Reflective practice is a continuous process and involves the learner considering critical incidents in his or her life's experiences. It involves thoughtfully considering one's own experiences in applying knowledge to practice while being coached by professionals in the discipline. It has been described as an unstructured approach directing understanding and learning, a self regulated process, commonly used in Health and Teaching professions, though applicable to all. [26]

Spiritual Intelligence (SQ)

The human intelligence that rests in that part of the brain that is connected to wisdom from beyond ego or conscious mind; it is the intelligence that recognises values and creatively discovers new values. [27]

Strategy

A plan of action designed to achieve a particular goal. [28]

Service Oriented Architecture (SOA)

A flexible set of design principles used during the phases of systems development and integration. A deployed SOA-based architecture will provide a loosely-integrated suite of services that can be used in multiple business domains. [29]

Small and medium enterprises (SME)

The current EU definition categorizes companies with fewer than 10 employees as "micro", those with fewer than 50 employees as "small", and those with fewer than 250 as "medium". In most economies, smaller enterprises are much greater in number. In the EU, SMEs comprise approximately 99% of all firms and employ between them about 65 million people. In many sectors, SMEs are also responsible for driving innovation and competition. Globally SMEs account for 99% of business numbers and 40% to 50% of GDP. [30]

Total Quality Management (TQM)

A management concept to reduce errors produced during the manufacturing or service process, increase customer satisfaction, streamline supply chain management, aim for modernization of equipment and ensure workers have the highest level of training. One of the principal aims of TQM is to limit errors to 1 per 1 million units produced. The application of TQM can vary tremendously from business to business, even across the same industry. [31]

World Class Manufacturing (WCM)

World Class Manufacturers are those that demonstrate industry best practice. To achieve this, the company should attempt to be best in the field at each of the competitive priorities (quality, price, delivery speed, delivery reliability, flexibility and innovation). Organisations should therefore aim to maximise performance in these areas in order to maximise competitiveness. However, as resources are unlikely to allow improvement in all areas, organisations should concentrate on maintaining performance in 'qualifying' factors and improving 'competitive edge' factors. The priorities will change over time and must therefore be reviewed. [32]

Chapter One

INTRODUCTION – THE ORIGINS OF THE PROJECT

We can do no great things – only small things with great love

Mother Teresa
[33]

1.1 INTRODUCTION

This research programme commenced to identify strategies that contributed towards the researcher's relative successes in change management. These composed complementing implementations of state-of-art enterprise-wide Information Technology (IT) systems with strategies to instil the employee behaviours needed to accept change, collaborate and participate to achieve desired future state for self and organisation.

Change management experiences of the researcher indicate that the lack of attention to fostering positive enterprise-wide employee collaboration may be one of the reasons for the underperformance of some change management initiatives. Fillicetti [8] confirms that the field of change management grew from the recognition that organizations are composed of people and that behaviors of people determine the outputs of an organization.

Collaboration empowers employees to share related knowledge, personal skills and experiences. This can lead to better understandings of the aims of the change management initiatives. Personal understandings can change people behaviours to accept, contribute and participate positively in the change management initiatives.

A significant contributor for the relative successes of change management initiatives participated by the researcher were the efforts made to understand employees and enable them to understand the aims and needs of the change initiatives.

Customer Relationship Management (CRM) systems are front office systems. Enterprise Resource Planning (ERP) systems are the complementary back office systems. Change management aims to improve both front and back office systems with the support of stakeholders.

This research project contends that successful implementation and adoption of change management requires people to change their consciousness to improve the way they work and interact together. Change in people's attitudes is needed to accommodate the uncertainties inherent in change. Change in attitudes requires training and collaborative relationships.

1.2 MORAL AND FINANCIAL VALUES

1.2.1 Moral Values

Wallis [34] stated that the 2008-2009 economic crisis presents us with an enormous opportunity to rediscover our values – as people, as families, as communities of faith and as nations. Wallis asserted that this could be a transformational moment because an economic recovery and also a moral recovery are needed. Wallis stressed the importance of asking right questions because when wrong questions are asked, no matter how good the answer, it won't matter very much.

Wallis [34] explained that if questions were “How can we get back to normal”, the answers may result in doing what caused the trouble. The right questions to ask about the economic crisis are “How will this crisis change us?” The answer will be found as individuals, families, friends, churches, mosques, synagogues and entire communities wrestle with the question. From a personal interview with the former British Prime Minister, Tony Blair, Wallis reported the former Prime Minister remark that the recent interest in spirituality is the change brought about by the current economic crisis.

Alexander [35] asserted that in the Western business world there seems to be a prejudice against the concept of spirituality in business. In business, the work ethic maintains that the only way to succeed is through hard work. The emphasis is put purely on “bottom line” figures and profitability, ideally short term profitability. With Spiritual Intelligence (SQ), the qualities of stillness and flowing water is used for

flexibility and acceptance to flow with what is. In SQ, the aim is to use the other 90 per cent of brain cells that are often not used.

Gunasegaran, A and Gunasegaran, S.C. [36] wrote about the ABC of life – Attaining Beneficial Change in personal attitudes and activities to address the deterioration of moral values in relation to religions, human conflicts, workplace and globalisation. They shared similar views as Alexander [35] on the application of Spiritual Intelligence in business.

Zak [37] stated that the foundations of any collaborative activity should be based on a skeleton of formal regulation with self-regulation because too much regulation and control can restrict personal creativity. Zak maintained that regulations must reflect people's underlying innate sense of values if they are to be followed. Hence Zak also confirmed Alexander [35] assertions for the need for flexibility in going with the flow.

1.2.2 Financial Value of Business Systems

Systems enable employees to improve their work performances. Integrated IT business systems improve work performances by enabling the sharing of relevant business information for improved efficiencies in business transactional processing. The aims of most technological developments, however, have been to make employees become more competitive and service oriented with faster and more accurate transactional processing without the balanced need for flexibility and participation of employees in the development stages.

Value for organisations is often created by their employees when they are enabled to collaborate and share information to add value to the organisation's services or products.

Butler [38] stated that there are some applications that are absolutely needed by organisations even though they may not add value. Butler asserted that what may add value and make organisations successful are customer preferences for its products and services and its participation in rapidly growing international markets.

1.3 EVOLUTION OF INTEGRATED IT-RELATED SYSTEMS

In most business environments, organisations need to continuously change and re-structure to meet ever changing and expanding corporate visions. Evolutions of IT systems with faster speeds, accuracy and integration have aided this change.

Chung and Snyder [39] confirmed with Orlicky [40] in their recollection that the simple manual inventory management systems that first came into existence in the 1960s were followed by the computer-aided Material Requirements Planning (MRP) systems of the 1970s and Manufacturing Resource Planning (MRPII) systems in the 1980s. These systems evolved to embrace wider spans of business processes and activities. Enterprise Resource Planning (ERP) systems later became popular IT applications in changing the business environment of the 1990s.

Butler [38] stated that though a necessity for most businesses, IT systems do not improve the quality, demand or value of its services and products. Butler asserted that since employees create the value, change management initiatives must address both the needs of systems integration and its employees.

1.3.1 Systems Integration

The current popularity of IT systems is partly due to efficiencies created by eliminating unnecessary manual business activities by automating routine transactional processing. By taking a purely technological approach, the aim of systems integration has been to improve speed and reduce the human cost in business processes.

ERP systems have traditionally been used in capital intensive production industries, such as manufacturing, construction, aerospace and defence. Now, they are increasingly used in the finance, education, insurance, retail and communications sectors to improve information transactional processing. Though effective transactional processing systems,

ERP systems are not easily adaptable to embrace the organisation's internal business processes or activities that employees may be more comfortable with.

1.3.2 People Centred Practices

Butler [38] reported that the emphasis in 2006 had been on Business Process Management (BPM) systems and Services Orientated Architectures (SOA) that were attempts to be more flexible and responsive to changing business needs.

Butler [38] stated that BPM and SOA systems are designed to be easily tailored for changing business needs. The successes of these systems are due to the continuous involvement by system users involved in the business activities rather than only involving specialists. BPM and SOA seek to co-ordinate people and systems across the organisation to enable business to be conducted more quickly, consistently and efficiently – hence driving costs down at every level of business processes. Cost reduction and return of investment (ROI) are achieved at the services level because each service represents transactions that cost money. [38]

Mooney [41] asserted that when business users understand the problem they are trying to solve, they understand the processes to be modelled. Business users are the key to ensuring fast implementation, validating that the processes are automated and presented correctly because they influence user acceptance once the systems are deployed.

Percival [42] wrote that when business processes are reviewed, many seemed inefficient and that Business Process Reengineering (BPR) is likely to have occurred hand in hand

with the activities of the IT department. Discovery of processes that make no sense in the context of the business is common and these may have existed for as long as anyone can remember in the company. Processes become ingrained into the culture of the business. Percival asserted that by necessity, cultural and organisational changes are needed to eliminate or streamline them.

1.4 RESEARCH JUSTIFICATIONS

The three case studies used in this research were chosen because each represented different businesses in the UK at different time periods and yet shared some commonality with regard to employee relationships.

Though all three case studies involved state-of-art information technology (IT) systems being developed in-house by the researcher, this research only seeks to identify some of the people-centric strategies that contributed in securing stakeholder acceptance, collaboration and participation in the researcher's change management initiative.

Justifications for this research project are related to the following events:

Between 1976 and 1982, the researcher's part-time employment in case study A provided an insight to positive business management strategies. Employees were generally happy with management. Between 1979 and 1982, the researcher's project as a Warwick University Teaching Company Associate in case study B provided an insight to negative business management activities. Employees were generally unhappy with management.

The immediate events that followed the successful conclusion of the researcher's project at case study B had a transformational impact upon the researcher in 1982.

The project had enabled stock holding costs to be reduced by about £ 1.22 million in 1982 besides other improvements related to production management. Articles about the success of the project were featured in three UK newspapers following a presentation to Sir Michael Edwards, the Chairman of BL Cars. The newspaper articles did not mention the efforts made by the researcher or any of the employees. The directors at BL Cars and Professor at Warwick University took credit for the work done.

Following the presentation, BL Cars management decided to make even more financial savings by making redundant some of those employees who had contributed to the success of the project. Though the researcher was wholly responsible for the changes he initiated, his collaborative relationships made him aware the changes required.

Out of personal anger of the management decision to make redundant some of those employees at grass root levels, the researcher tendered his resignation from both the project and Warwick University because he felt that he had betrayed those who had worked with him for 3 years for the successful outcome of the project.

Since 1982, the researcher has never assumed a management role. Most of his roles provided him with the opportunity to work with senior management and employees at grass root levels. This provided him with the opportunity to make management aware of the needs of the employees. He also made employees aware of the opportunities, constraints and risks faced by management.

The researcher left the UK soon after his resignation. Within months of leaving UK, the researcher was involved in a serious road traffic accident in Singapore that left him unconscious for about a month. He still suffers from the effects of a compound fracture of his left femur, partial paralysis of his left side and double vision. The researcher's recuperation period was another transformational period when he had time to reflect and make a spiritual response.

The spiritual response was not to be concerned about returning to what he did before but regard the accident as an opportunity to change and share his knowledge and skills. This is what Wallis [34] advocated. As recommended by Alexander [35], the researcher had used his spiritual intelligence to allow things to happen naturally. This was important because the researcher was unable to plan and schedule his health and financial recovery. He had to let events happen naturally and whatever happened, the researcher had to accept with gratitude.

The accident occurred in 1982. Whilst a lecturer in Singapore between 1983 and 1986, the researcher authored the book titled "First Step Towards Computing" [43] to share his practical knowledge related to the use of microcomputers in business. The book was targeted at adults to make them aware of the power of microcomputers and how they could change business processes. The book, published by Heinemann Publications in 1986, is not related to the current research.

In 1986, the researcher returned to UK and assumed roles in local government and the private sector. To keep up with evolving sciences, he secured an MSc in Business Information Systems in 1992 and enrolled on this part-time PhD research in 2004.

The aim of the PhD research was not to gain employment but contribute knowledge to improve working conditions at grass root levels.

Some of the global concerns in the beginning of the twenty first century relate to global warming, climate changes, environmental pollution and depletion of fossil fuel energy resources. The researcher made the decision to use his knowledge and skills to search for practical solutions. The researcher authored “Generating Free Electricity at Home with Solar Energy” [44] in 2008. The aim of the book was to make readers aware of current concerns and potential solutions. The book was about alternative technologies and is not related to the current research.

The economic crisis of 2008 referred to by Wallis [34] is another transformational event. Change was needed by the global community. In the book “Change We Need” [45], co-authored with his wife, the researcher makes readers aware of some of the negative commercial activities and spiritual intelligence solutions for stress free living. It is not related to the current research.

The justification for this research is contribution to knowledge related to developing management strategies that may lead to corporate cultures that secures employee acceptance, collaboration and participation in business process reengineering initiatives for continuous improvements. The next section states the research hypothesis, aim and objectives.

The thesis or parts of the thesis have not been used/published else where or submitted for any other award.

1.5 RESEARCH HYPOTHESIS, AIM AND OBJECTIVES

Research Hypothesis

This project is based on the premise that successful outcomes of business process reengineering (BPR) initiatives may require integrated management strategies related to people, capital, information, experiences, opportunities, crisis and result/reward to secure people acceptance, collaboration and participation in change management initiatives for continuous improvements. These management strategies may need to be generative and the involvement of change leaders may be important to develop corporate cultures that embrace continual improvements.

Research Aim

Create and test a framework of generative management strategies that may nurture appropriate corporate cultures to secure employee acceptance, collaboration and participation in business process reengineering initiatives for continuous improvements.

Research Objectives

- **Develop a framework of generative management strategies that may facilitate employee acceptance, collaboration and participation in BPR activities.**
- **Develop and evaluate the contribution of generative management strategies to secure successful outcomes and/or avoid some causes for poor performances of change management initiatives in BPR activities.**

1.6 CHAPTER OVERVIEW

This chapter developed the realisation of the need for change with emphasis shifting to management strategies that facilitate positive employee collaboration.

Lack of emphasis on management strategies to foster employee acceptance, collaboration and participation are presented as some of the root causes for the underperformances of change management initiatives.

This chapter asserts the importance of generative management strategies to nurture corporate cultures that secures employee acceptance, collaboration and participation in business process reengineering initiatives for continuous improvements.

The research justifications together with the researcher's statement that this thesis or parts of the thesis have not been used/published else where or submitted for any other award is made.

The research hypothesis, aims and objectives are stated.

The next chapter introduces the research methodology and thesis review of this research.

Chapter Two

RESEARCH METHODOLOGY AND THESIS REVIEW

Research Methodology Selection

There are no ideal solutions to research methodology, only a series of compromises

McGarth et al [46]

2.1 INTRODUCTION

Chapter one introduced the research theme and summarised the importance of complementing integration-centric technological systems with employee-centric practices for change management successes. The research justification, hypothesis, research aim and objectives for this research were stated.

This Chapter has two main themes:

- A review of research methodologies together with the justification for the chosen research methods. The research method adopted is justified; and
- A chapter by chapter review to illustrate the purpose of each chapter and how they interrelate.

2.1.1 Issues in Research Methodology Selection

Remenyi et al [47] identify two common differentiators of research methodologies are empirical and theoretical methods; these they categorise into Nomothetic and Ideographic approaches. The Nomothetic approach emphasises the importance of basing research upon systematic protocols and techniques using quantitative techniques for the collection and analysis of data. This is a deductive process. The use of qualitative techniques for analysis exemplifies an inductive process. The Ideographic approach, by contrast, emphasises the importance of basing research upon ‘getting inside’ situations and involved the researcher as a participant / observer.

See table 2.1 for comparisons [48] of the two approaches.

Blaxter et al [49] argue that thinking and writing in a methodological manner can enhance research because:

- It leads to a better appreciation of the advantages and disadvantages of particular methods on their own or in combination.
- It allows the researcher to relate to similar projects undertaken by other researchers.
- It may provide interesting perspectives on the evidence which may be of more interest to the researcher than the research itself.

Scandura et al [50] argue the imperative that management researchers choose appropriate research methods that will have a direct impact upon the validity and contribution of the study's results.

	Nomothetic methods	vs	Ideographic Methods
1	Deduction.		Induction.
2	Explanation via the analysis of causal relationships and explanations by covering-laws (etic).		Explanation of subjective meaning systems and explanation by understandings (emic).
3	Generation and use of quantitative data.		Generation and use of qualitative data.
4	Use of various control, physical or statistical, so as to allow the testing of the hypothesis.		Commitment to research in everyday settings, to allow access to, and minimise reactivity among the subjects of research.
5	Highly structured research methodology to ensure replicability of 1,2,3 and 4.		Minimum structure to ensure replicability of 2, 3, and 4 as a result of 1.

Table 2.1 Comparisons of Nomothetic and Ideographic Approaches

(Adapted from [48])

2.1.2 Triangulation

Conducting a research project without generating spurious results and making unfounded recommendations is difficult. All research methods have inherent limitations. No one research design will lead to validated solutions [51]. Triangulation of research designs is necessary to overcome procedural and interpretive flaws and enable data to be compared and contrasted with a degree of objectivity.

Bryman [52] describes triangulation as the use of more than one approach to the investigation of a research question in order to enhance confidence in the ensuing findings. Bryman asserts that though triangulation can add a sense of richness and complexity to an inquiry to enhance credibility and persuasiveness of a research account, deriving data from different research methods can be unambiguously compared and regarded as equivalent in terms of their capacity to address a research question.

Scandura et al [50] are concerned that the triangulation of research methods is not widely used in management research due to possible inaccuracies inherent from using a single method.

Triangulation enables cross checking data by compensating the strengths of each method used. This approach, according to Swartz et al [53], can balance out the problems inherent to different research methods.

An example of the use of triangulation would be where a questionnaire is used as a quantitative method to study an organisation. The data can be analysed numerically but the

results may not provide the researcher with insights or intuitions relating to dynamics and trends. For example, a questionnaire of unemployed adults in UK may give results in the form of numerical answers, but such data may not necessarily lead to understanding of the social / economic situation that influenced the statistics obtained. To triangulate such data, the researcher may choose to apply qualitative methods such as semi-structured interviews to obtain a more comprehensive in depth understanding of the situation/variables. Quantitative knowledge alone is unlikely to lead to awareness and understanding of the effects and various factors that influence human behaviour.

Scandura et al [50] state that the failure of management researchers to triangulate can limit the applicability and validity of their findings. Hence, it is both essential and good practice to triangulate research methods to enable debates to be aired, proposals and recommendations to be made, and with corroborating data from other sources, scientific consensus to be reached.

2.2 RESEARCH STRATEGIES

In deciding upon the most appropriate methodology for the research theme, combinations of methodologies were decided upon. Management strategies require management methodologies. People and collaboration, being related to social sciences, require a specific set of methodologies. The need for ecological validity in real-life situations requires relevant methodologies. This research being an Information Technology related project requires another set of methodologies.

The following research methodologies are relevant to this project:

- Action Research;
- Ethnography Research;
- Agile Developments;
- Soft systems; and
- Longitudinal Case Study.

2.2.1 Action Research Methodology

Yin [54] regards action research as a grounded method, rooted in the realities of the situation, with a deep-meaning orientation. He noted this methodology has been described as a concept, a philosophy, an emancipatory process and a methodology of learning. For many years, his propositions attracted protests from conventional research and learning schools but these concepts have now become main stream accepted doctrine. He stated that participant observation is an integral feature of action research where observation is less a “natural” gift, than a highly skilled activity for which an extensive background knowledge and understanding is required along with the capacity for original thinking and the ability to spot significant events.

Action research involves collaborations. Rapoport [55] stated “Action research aims to contribute both to the practical concerns of people in an immediate problematic situation and to the goals of social science by joint collaboration within a mutually acceptable ethical framework”.

The action research methodology is particularly relevant to change management research where there is a planned intervention by the researcher in naturally occurring life events. The effects of the intervention are monitored and evaluated with the aim of discerning whether the expected outcomes are attained. The research is driven by the researcher's personal knowledge, experience and skills. The aim of action researchers is not only to contribute to knowledge but also help resolve some of the current concerns of the people who are trying to address problematic situations.

This is the main methodology used with planned intervention by the researcher in naturally occurring life events; contribution to the concerns of people in an immediate problematic situation; joint collaboration within a mutually acceptable ethical framework and a research project driven by the researcher's personal knowledge, experience and skills.

2.2.2 Ethnography Methodology

The key feature of the ethnography approach is that it is based on naturalist modes of enquiry, such as observation and interviewing, within an inductive framework. Based on socially acquired and shared knowledge, patterns of human activity are observed and accounted for.

Like action research, participant observation is also an integral feature of this methodology.

Ethnography, with its commitment to induction and unstructured methods of data collection, creates replication difficulties that question its reliability. Furthermore, since

ethnography involves the intensive study of a small number of cases, claims of population validity usually are limited to the actual phenomena under investigation during field work.

The advantage of the ethnography methodology, however, is its ecological validity. Bracht and Glass [56] stated that ethnography has advantages over positivistic research methodologies (e.g. laboratory experiments and surveys) that suffer from deficiencies in ecological validity. Ethnological research, unlike most other research strategies, takes place in the natural settings of everyday activities of the subjects and systems under investigation.

This methodology was used in the research project to nurture collaborative relationships between relevant stakeholders in the natural settings of everyday activities of the employees and systems under investigation. It was used to raise awareness of the practical concerns of people in an immediate problematic situation.

2.2.3 Agile Methodology

Agile methodology is more suited for in-house software developments. These encourage proactive participation and response to modifications or overcome conflicts experienced anywhere within the software development lifecycle involving people, processes and technology. The approach taken is not too inflexible, planned or rigorous where the underlying need is for going with the flow, doing what seems appropriate and responding to the customer's requirements. Going with the flow is an example of employing spiritual intelligence in business as prescribed by Alexander [35].

Agile Software Development relates to developing software by actually doing it and helping others to do it. Using this approach in software development:

- People and interactions are valued more than processes and tools
- Working software is valued more than comprehensive documentation
- Customer collaboration is valued more than contract negotiation
- Responding to change is valued more than following a plan.

While there is value in the items on the right, the Agile Methodology values the items on the left even more.

The quantitative successes attained by the researcher's projects were primarily due to use of agile methodology in in-house software development with proactive participation of stakeholders. Systems development evolved as the researcher became aware of the needs and problems of relevant stakeholders due to the collaborative relationships. To secure stakeholder acceptance, addressing operational needs took priority over following a plan.

2.2.4 Soft Systems Methodology

Developed in the 70s, Soft System Methodology (SSM) is a systemic approach for tackling real-world problem situations [57]. This is one of the methodologies for dealing with the kind of messy problem situations that lack formal problem definitions. The aim of SSM is to bring about improvements to situations perceived as problems by facilitating learning processes that allow its users to gradually develop more comprehensive understandings of the situation under study.

Wang & Ahmed [58] reflect that it is the enriched elements of soft methodologies that have enabled current systems methodologies to adequately deal with the dynamic complexities of the modern world by addressing some of the following:

- Relationship with the environment
- People's perception and judgement
- People's inquiry and learning
- People's emotion and emotional intelligence
- Creative thinking
- Ethics and human well-being

This is the methodology used to develop the research project's seven Employee Relationship Planning (ERP) strategies.

2.2.5 In-House Software Development Methodology

Marwala et al [59] assert that most companies recognize the many advantages of buying software applications off the shelf rather than developing them in-house. In this way, they can keep up with of the innovations created by focused specialists. In spite of those advantages, custom-built applications are still very much a part of the IT landscape. Companies in many sectors spend well over half their applications budgets on custom software, used largely to enhance, support, and operate customized systems. For large companies in competitive, fast-moving industries such as telecommunications, financial services, high tech, pharmaceuticals and media, those outlays can run into hundreds of millions of dollars. Banks, for instance, frequently build custom applications to support new financial products or to manage risk.

Pharmaceutical companies regularly build custom applications to support R&D and marketing activities.

A survey by Verner et al [60] found that software development practices of a number of software practitioners in large businesses involved almost exclusively in-house software development.

This was the methodology used to develop custom applications to support the immediate needs of each case study as a result of business process reengineering with active stakeholder collaboration.

2.2.6 Longitudinal Case Study Methodology

The case study methodology is a research strategy appropriate for understanding the dynamics present within single settings. Yin [54] defines case study as “an empirical investigation into contemporary phenomenon operating in a real-life context”. He adds that it is particularly valuable where the kinds of control present in laboratories are not feasible or ethically justifiable.

Zonabend [61] stated that case study research is done by focusing on the complexities in observation, reconstruction and analysis of the cases under study. These incorporate views of the “actors” - the people and behaviour in the case study.

Amaratunga & Baldry [62] state that multiple case studies strengthen case study results by replicating matching patterns, thus increasing confidence in the robustness of theory. The case study approach involves theory building and verification rather than testing. They add

that the selection of cases inevitably involves discretion and judgement, selecting and emphasising examples that provide understandability whilst exhibiting appropriate components under investigation.

Though there are many advantages to the use of case studies, there are also criticisms. One criticism is that it suffers from a lack of rigour and excess bias. The dangers of ad hoc theorising and of neglecting to test data are significant. The use of “subjective” judgements during data collection stages can render constructs invalid. According to Bromley [63], researcher bias also has an impact on the internal validity of the data.

Berger [64], however, states that external validity is difficult to measure because it is difficult to generalise findings to different settings as phenomenon. Amaratunga, et al [62] indicate that evidence from multiple case studies are often considered more compelling and more robust. They add that whether the theory is “generalisable” is related to the complexity of the external validity, i.e. whether external conditions are thought to produce much variation in the phenomenon being studied.

Yin [54] suggests that the “how” and “what” types of research questions are suited to the exploratory case based research methodologies. He adds that the case study methodology is particularly suited to innovation implementation over a longitudinal length of time.

Remenyi [47] adds that the case study approach can be used to track development of case characteristics over time.

Multiple case studies over a longitudinal length of time are used to increase robustness of theory as well as to understand and explore the “how”, “what” and “why” types of research questions. Testing was not feasible or ethically justifiable since the research was conducted in a real-life context. The first two case studies were made from memory. The second and third case studies were triangulated with questionnaires of participants who wrote a brief testimonial of the case study. It was not possible to triangulate the first case study using questionnaires because the organisation is no longer trading.

2.3 RESEARCH METHODOLOGY JUSTIFICATION

The choice of methodology is determined by the type of research together with the aims of the research project. This research aim is to develop a framework of people-centric strategies for successful change management outcomes.

Rugina [65] proposes that influences are often not measurable when this involves individuals and groups of people in relationships.

This research project relates to individuals and their relationships with stakeholders in work settings. Many factors, including different perceptions, influence the outcome of real-life situations. Hence this research is not easily measurable or replicable. Qualitative measurement is made with the use of testimonials from relevant managers who participated in the case studies. The use of similar strategies in multiple case studies over a longitudinal length of time proves its replicability.

Using action research and ethnography methodologies, the researcher assumed the role of the overt participant observer. But rather than just observing and reporting, the researcher entered into on-going close collaborative relationships with stakeholders to understand the “wider picture” before proposing, developing and implementing computer-aided applications and initiating business process reengineering.

Agile software development methodology was used to develop applications that addressed immediate needs of stakeholders who required flexible tools to continuously improve their performances.

Changing people's attitudes and perceptions is essential for successful change management. Securing stakeholder involvement is one way of changing their attitudes and perceptions. Soft systems methodologies were used for tackling real-world problem situations by facilitating learning processes that allowed stakeholders to gradually develop their personal understandings of the situation under study.

The longitudinal case study methodology forms the core of this research.

The first and second case studies between 1976 and 1982 are based on memory and on-going relationships with relevant stakeholders. The last case study between 1996 and July 2009, when the researcher opted for voluntary redundancy, is based on actual work done. Since it was work related and not a research project, no analysis of tests were made.

The successes/failures of the case studies are confirmed by way of testimonials from relevant managers. These were written by the practitioners following interviews to confirm the valued created by the researcher.

The first two case studies were the researcher's first roles in computing and change management. The third case study relates to the researcher's last role in change management. The use of only the first and last roles is an attempt to reduce researcher bias on the choice of case studies.

If the project was restarted, the researcher would probably choose another set of three roles/jobs done over the same 33 year period. This would be done to get a different perspective.

Triangulation was achieved by using three case studies over the longitudinal period of 33 years to identify the strategies that led to improvements in real-life situations. Further triangulation was made by way of questionnaires that relevant change leaders/managers used to write a testimonial outlining the success/failure of the case studies and personal experiences gained.

Quantitative methods used are the financial savings attained by the organisation as a result of the researcher's projects. Specific details are withheld for confidentiality reasons.

Qualitative methods used relate to testimonials from the managers in charge of the case studies who described benefits to the organisation and personal experiences.

Fillis [66] assert that the adoption of a biographical approach with data triangulation from conventional quantitative and qualitative methods enables management researchers to begin to understand how chaos and fragmentation are located in the world where formal, linear methods of understanding are being superseded by more creative conceptualisations and interpretations of the truth. Fillis stated that the adoption of the biographical approach to entrepreneurship can result in uncovering rich descriptions of valuable data, which would otherwise remain undiscovered if more conventional approaches were adopted. The testimonials from the relevant managers are the 3rd party biographical data as a result of interviews with practitioners.

2.4 RESEARCH METHOD ADOPTED

In order for the aims of this research to be carried out, the following preliminary tasks had to be completed:

- Investigate current research on IT-related systems, Systems Integration, Enterprise Systems, Change Management, People Collaboration, People Intelligence, Spiritual Intelligence and Appreciative Inquiry.
- Reflect upon the three longitudinal case studies to identify the benefits and problems experienced and or overcome by the use of the research project's strategies.
- Identify how strategies that contributed towards successful inclusion of stakeholders in the design, implementation and use of enterprise-wide systems were attained through positive dialogues and collaborative relationships.

A literature review was first carried out to investigate current research in the field related to this research project. This review was especially focused to identify current shortcomings of enterprise-wide systems not taking a people-centred approach. The literature review was carried out over the whole duration of the research as new understandings of people, intelligence, collaboration and change dynamics came to light. The original thesis, however, was not updated. This has now been addressed with reviews dated up to 2010.

The aims of carrying out the literature review were to:

- Acquire awareness of relevant work and publications done by others;
- Build upon the work of others; and
- Avoid duplication of effort.

The second part of the research method was to use the longitudinal case study methodology to reflect upon and report on the first two and last change management projects undertaken by the researcher. Both the reasons for success and failures are identified and reported.

The first two concurrent projects were successful in reducing financial costs and ‘fire-fighting’ situations. The last project includes 3 sub projects where the first two were successful and the third was a failure.

The Action Research and Ethnography methodology, with Participant Observation, is used to develop contribution to knowledge whilst solving real-life problems.

The longitudinal case studies relate to the following three organisations over 33 years in different geographical locations and areas of application:

- | | | |
|---|--|--------------|
| 1 | Case Study A*: Container Manufacturer | 1976 to 1982 |
| 2 | Case Study B*: Vehicle Manufacturer | 1979 to 1982 |
| 3 | Case Study C*: Further Education College | 1996 to 2009 |

(* Due to Data Protection Legislation, identities of collaborating organisations are withheld)

The soft systems methodology was used to identify and define the real-life problems to be addressed.

NB. Specific details of successful IT system developments using the In-House and Agile software development methodologies are not described in this research. These methodologies were used to develop systems with stakeholder participation to address immediate problematic situations in the workplace. It also ensures user acceptance.

2.5 THESIS REVIEW

The hypothesis was developed based on the researcher's projects and literature survey. A summary of the thesis structure is given, as a chapter by chapter overview, to demonstrate its logical flow.

Chapter 1: Introduction – The Origins of the Project

- Details the origins of the research project.
- Focus for the research is developed.
- Lists the justifications, hypothesis, aims and objectives of the research.

Chapter 2: Research Methodology and Thesis Review

- This chapter reviews and justifies the choice of research methodologies used in this research.
- A chapter review of all the chapters in this thesis is included to illustrate the evolution of the research.

Chapter 3: Change Management

- Reviews change management from a people perspective in changing individual attitudes and organisational culture. This chapter includes the role of managers and leaders in organisational change.

Chapter 4: People Collaboration

- Reviews change, uncertainties and collaborative activities. After an overview of Kaizen, reasons for the underperformance of change management initiatives are identified.

Chapter 5: People Intelligence

- Reviews people's intelligence in relation to Intelligence Quotient, Multiple Intelligence Theory, Emotional Intelligence and Spiritual Intelligence to improve understanding of people intelligence.

Chapter 6: Appreciative Inquiry (AI)

- Introduces Appreciative Inquiry that emphasises the use of positive inquiries for transformational change.

Chapter 7: Case Study A – Container Manufacturer (1976 – 1982)

- Describes the case study, barriers to change and the researcher's seven employee-centric strategies used in the case study.

Chapter 8: Case Study B – Vehicle Manufacturer (1979 – 1982)

- Describes the case study that was undertaken concurrently with Case Study A, defines inherent dynamics and identifies barriers to change together and the researcher's seven employee-centric strategies used in the case study.

Chapter 9: Case Study C – Further Education College (1996 – 2009)

- Describes the case study, barriers to change and the researcher's seven employee-centric strategies used in the case study.
- Three sub-projects undertaken are described; the first two were successful while the third was a failure.

Chapter 10: Discussions of Case Studies

- Discusses the case studies to identify the strategies that the researcher used to ensure successful outcomes by nurturing positive collaborative organisational cultures.
- Reasons for the failure of one sub project are described to illustrate some of the potential reasons for change management failures.

Chapter 11: Conclusion

- Draws conclusions of the research and contribution to knowledge.

Chapter 12: Recommendations for Further Work

- Recommendations for future work, related to people relationships.

2.6 ORIGINAL CONTRIBUTION TO KNOWLEDGE

Introduce generative Employee Relation Planning (ERP II) management strategies, based on current approaches in positive leadership, emotional intelligence, spiritual intelligence, appreciative inquiry and Kaizen to nurture corporate cultures that may secure employee acceptance, collaboration and participation in business process reengineering initiatives for continuous improvements.

2.7 CHAPTER OVERVIEW

This chapter reviewed relevant research methodologies and justified the choice of research methodologies used in this research project.

The thesis structure was summarised, chapter by chapter, to give a general overview of the entire research with each chapter highlighting its purpose and how they interrelated.

- Chapter 1 describes the origins of this research project.
- Chapter 2 describes the research methodology and thesis overview.
- Chapter 3 reviews literature on Change Management.
- Chapter 4 reviews literature on People Collaboration.
- Chapter 5 reviews literature on People Intelligence.
- Chapter 6 reviews literature on Appreciative Inquiry.
- Chapter 7 describes case study A and related ERP II Change strategies.
- Chapter 8 describes case study B and related ERP II Change strategies.
- Chapter 9 describes case study C and related ERP II Change strategies.
- Chapter 10 discusses the three case studies.
- Chapter 11 concludes this research.
- Chapter 12 makes recommendations for further work.

The original contribution to knowledge was stated.

Chapter Three

CHANGE MANAGEMENT

Little tweaks, all through the system will eventually build up to sweeping changes

Turnbull [67]

3.1 INTRODUCTION

Change management from a people's perspective requires individuals to change their paradigms in the way they analyse, perceive, gather data and acquire knowledge, capabilities and skills to adapt to changing situations. Change requires individuals in the roles of change sponsors, leaders, developers, implementers, managers and users to accept change, collaborate with stakeholders and participate in change management initiatives.

Using the metaphor of an ice berg whose direction of movement is dictated by the undercurrents that exert influence over more than 90% of the volume of the ice berg that is unseen below sea level, it is often not externally visible employee behaviour but the unseen organisational culture that ultimately influences how change initiatives are accepted and used to achieve corporate objectives. Employees attitudes are the observed "undercurrents" that collectively determine organisational culture.

This chapter will focus on corporate change initiatives and identify reasons for failures with the aim of understanding their causes.

Organisational culture is then reviewed together with the different roles of change managers and leaders, the agents of change.

3.2 FAILURES OF CORPORATE CHANGE SYSTEMS

Heald and Kelly [69] forecasted spending on ERP would increase from \$21.02 billion in 1998 to \$72.63 billion in 2002. These figures reflect approximately 2.7 % to 6.4% of the overall IT spending over the period as confirmed by IDC [70].

Koh S.C.L. and Saad S. [71], provided further confidence in those forecasts with a Boston based Advanced Manufacturing Research report that confirmed ERP market would reach \$66.6 billion by 2003 at an estimated compound annual growth rate of 32 percent. They asserted that these systems are still under-performing even within such a rapidly growing global market.

Research by the Butler Group [72] identified that major reasons why almost 60% of large scale collaborative change management projects fail as lack of user adoption of the change initiatives. Other challenges identified by Butler are lack of effective communication, expectations that one system/provider/application can provide solutions to resolve all needs, implementations that are revolutionary and not encouraging people partnerships.

IFS [73], in confirming Butler [72], stated that the causes for EPF failures are insufficient budget provisions, inadequate specifications at the acquisition stage and more significantly to not assigning the right type of people to the implementation team.

3.3 POSSIBLE REASONS FOR CHANGE FAILURES

Complex integrated systems, such as ERP, are high priced solutions that can become routine transactional processing systems that tie up efforts of many senior trained individuals. Butler [72] stated that “Using a sledgehammer to crack a walnut comes to mind when we look at those huge, complex ERP applications printing invoices and maintaining account details – its hardly rocket science.” Butler added that specialist applications that create value for organisations are those developed or adapted in-house to incorporate a company’s unique business process and product structures.

Butler [72] suggested that applications that make a difference to the business are those that make use of the brightest people to develop value enhancing and profitable applications. Value enhancing applications nearly always are based on unique in-house developmental activities where developers collaborate closely with the employees who understand the business needs and participate to add value to the business.

3.4 CONSEQUENCES OF ORGANISATIONAL CHANGES

Organisational change is widely regarded as a major issue in people's life. Chusmir and Franks [74] found evidence to suggest that stress in people has an effect on the overall organisational efficiency and effectiveness. McHugh [75] suggested stress should be included as part of all organisational change management agendas when she proposed people involved in the management of change need to acknowledge increased pressure and stress are put on employees by continuous organisational changes. McHugh asserted that organisations must consider incorporating stress management programmes within their change management programmes.

Armenakis and Bedeian [76] had earlier concluded that stress is an obstacle to change planning and implementation. They stated "Receptivity, resistance, commitment, cynicism, stress and related personal reactions are clearly relevant criterion variables to be considered in the framework of planning and implementing organisational change. Change can cause cynicism and stress, thereby inhibiting success."

Summarising debates about the meaning of job stress, Beehr and Franz [77], categorised three types of stress:

1. Stimulus-based where a situational or environmental based influence impinges upon the person.
2. Response-based where the individual's psychological or physiological reaction to the situational / or environmental force is the cause.
3. Stressor – Strain where stress is both the stimulus (source) and response (outcome).

Arnold et al [78] found that theories based on the above definitions created a more “complete” perspective of the dynamics of stress. Elizur and Guttman [79] had earlier validated Beehr and Franz [77] categories of stress with their statement “attitudes toward change in general consist of a person’s cognitions about change, effective reactions to change and behavioural tendency towards change”.

Beehr and Franzet [77] together with Elizur and Guttman [79] reached general consensus that stress is a symptom of inappropriate change management style or implementation that did not address the needs of people involved. Piderit [80] confirmed that employees’ responses to organisational change can range from strong positive attitudes (“this change is essential for the success of the organisation”) to strong negative attitudes (“this change could ruin the company”). Change can be received with excitement and happiness or anger and fear. People’s emotional response to change ranges from positive intentions of support to negative intentions of opposition.

Eby et al [81], Martin [82], Kotter [83] and Gilmore et al [84] agreed that employees’ positive attitudes to the change are vital to achieving organisational goals and success in the change management initiatives.

Beer and Nohria [85] found at least 70 percent of all change management initiatives failed to achieve anticipated results. Deloitte & Touche [86] claimed that the number one reason organisational change initiatives fail is people’s resistances to change which is closely linked with the development of negative personal attitudes towards the change.

Periman and Takacs [87] proposed that a person's emotional state stimulated by the change processes to include equilibrium, denial, anger, bargaining, chaos, depression, resignation, openness, readiness and re-emergence. Bovey and Hede [88] confirmed that all these responses to change are directly related to the resistance to change and that since change process involves going from the known to the unknown, these states are considered normal.

In going from the known to the unknown, Armenakis et al. [89] asserted that beliefs, perceptions and attitudes are critical to successful change schemes. Arnold et al [78] stated "attitudes reflect a person's tendency to feel, think or behave in a positive or negative manner towards the object of the attitude".

From the evidences, the proposition of this project is change managers and change leaders must nurture relevant employee perceptions and attitudes to accept, collaborate and participate in the change management initiative.

3.5 CHANGE MANAGERS and CHANGE LEADERS

Change leaders sponsor and facilitate change. Change managers sustain performance in line with the objectives of the change initiative. Both roles are equally important. Kirton [90] and Kanter [91] confirmed that leadership is important to initiate change and equally important are the roles managers play when implementing change.

3.5.1 Change Managers

Change managers are middle level managers and functional specialists that build support for the changes within their business units and key functions. They translate vision into project management activities and tasks. They perform the role of empowering senior management commitment to the change interventions and technological innovations.

The Change Management Learning Centre [92] asserts that while managers and supervisors may not play a formal role in developing the change management approach, they are critical in making organisational changes successful. Three relevant roles of managers and supervisors in change management are as:

- Communicators;
- Coaches; and
- Resistance Managers.

Beatty and Lee [93] together with Ulrich [94] recommend flatter and more dynamic organisations where managers embrace change-orientated attributes or behaviours to cope with uncertainty and become leaders, innovators and risk takers.

Fligstein [95] associated the transformation in manager roles with the shift from traditional “Command and Control” style of management based on top-down directions and sanctions to “Involvement and Commitment” styles where managers devolve power whilst enabling or “empowering” individual employees and self-managed teams to take responsibility for front-line decision making, customer care, quality standards and performance targets.

Storey [96] and Newell and Dopson [97] explored impacts of this shift on the role of middle managers and found that they became both the “Object” and “Agency of change”. Rothwell [98] confirmed that as hierarchy is weakened and authority devolved, managers are increasingly expected to overcome organisational boundaries and bring teams and groups together to manage innovation and change. This requires a set of soft interpersonal skills including:

- Listening
- Communicating
- Team building
- Facilitating
- Negotiating and
- Conflict resolution.

Farnham [99] asserted the above soft skills require managers to develop “Change orientation” demonstrated by personal flexibility and competence to deal with uncertainty or ambiguity. They also must be able and willing to take risks.

Boddy and Buchanan [100] reported that coming to terms with the shifting nature of change-orientated attributes of managerial roles can be disappointing when they are expected to meet profit and performance targets whilst also managing culture change. It can be difficult to cope with the tensions created and are likely to burn out when even two managers with comparable levels of competencies are likely to act and perform differently.

3.5.2 Change Leaders

Various traits and qualities are associated with change leaders and their impact on employees to act as the catalysts of change. Yates [101] summarised his 4E of change leaders as:

- Envision – value, drive and setting of goals and strategies.
- Enable – identifying tools, technologies, structures and people.
- Empower – creating trust and interdependence between leaders and followers.
- Energise – personal behaviour as the motor to drive the entire system.

Kirkpatrick and Locke [102] with Dulewicz and Herbert [103] summarised the “traits” of leadership as:

- Personal drive
- Desire to lead
- Honesty and integrity
- Cognitive ability
- Self-confidence
- Knowledge of the business
- Flexibility
- Risk taking and
- Coping with change and uncertainty.

Kirkpatrick and Locke [102] with Dulewicz and Herbert [103] asserted that change leaders are usually executives and senior managers at the top of the organisational hierarchy who envision, initiate or sponsor strategic change of a far reaching or transformational nature. Inspiring visions are as important as the need for knowledge, drive and the ambition to lead successfully.

Senge [104] [105] drew attention to underestimation of the significance of change agency as a “distributed phenomenon” at all levels in the organisation facing radical or continuous change – not merely by leaders and managers. Senge [104] confirmed that important attributes of change leadership are the capacity to sponsor and facilitate change that brings forth insights and new conceptions of reality. Some ethical attributes of leaders are the virtues of integrity and honesty together with the consistency of purpose and communication that lead to trust.

Kotter [83] proposed that “Leadership defines what the future should look like, aligns people with that vision, and inspires them to make it happen.” Leaders can be considered to be essential to trigger or sponsor strategic change by inspiring and sustaining the people.

3.7 STRATEGIC CHANGE LEADERSHIP

Jackson [106], Stace et al [107], Kanter et al [108], Limerick et al [109], Naisbitt et al [110] and Ulrich et al [111] confirmed that against the backdrop of increasing globalisation, deregulation in certain sectors, growing knowledge workforce and shifting

social and demographical trends, the primary task of management today is the leadership of organisational change.

Goleman [112] asserted that in the new environment of change and flux, it became critical for leaders to develop interpersonal skills. Change management, in this context, involves the two roles of charismatic and instrumental leaders who perform distinct functions that complement each other. Charismatic leadership is defined as “personalised leadership” underpinned by interpersonal skills that are crucial to envisage, enable, empower and energise followers. This is confirmed by Yates [101]. “Instrumental leadership” is characterised by organisational design, control and reward systems that involve managing environments to create conditions that motivate desired behaviour. This is confirmed by Nadler et al [113].

Key dimensions common to both charismatic and instrumental leadership roles are:

- Challenge the status quo to create “readiness to change”.
- Inspire a shared vision and personally communicate the future direction with clear and honest answers to followers.
- Enable others to act: energise; empower; build teams; provide tangible support with appropriate resources; and put in place appropriate systems and structures.
- Symbolic and substantive actions: use rewards and recognition to gain support; recognise short-term gains or success stories to emphasise recognition of the new behaviours; and taking decisive action in identifying and addressing resistance.

- Modelling the way: enacting the new behaviour in deeds as well as in words; and personally demonstrating senior management involvement and commitment. Senior management involvement is fundamental to success.
- With the help of key stakeholders, communicating the message repeatedly up, down and across the organisation to ensure that the momentum and enthusiasm for change is not diminished over time. Communications by top management is a powerful lever in gaining commitment and building consensus for change. Successful implementation occurs in companies where executives “walk the talk”, teaching new behaviour by example.

Hamel et al [114] stated the role of senior management is to “set clear corporate challenges” that matter to everyone on a personal level. Personal involvement of senior management signals the level of commitment to change and heightens the sense of urgency for change. Senge [115] observed that to lead change effectively means acknowledging that senior managers do not have all the answers and encouraging “integrated thinking and acting at all levels”.

Stace et al [116] asserted that successfully implementation and sustenance of organisation-wide change demands long-term, strategic approaches, incorporating both “hard” (strategy, structure, systems and technology) and “soft” (visions, values, behaviour and attitudes) issues. Blumenthal et al [117] asserted that if change is to “stick”, change leaders must blend operational improvements with strategic transformation and corporate renewal.

3.7 POSITIVE LEADERSHIP and STRENGTH-BASED APPROACH

Ledwidge asserts [118] leaders must first be human – they need to understand people beyond the limited context of the organisation to the wider context of their humanity’.

Effective leaders enable change to take place. These leaders are not merely senior people in organisations. Anyone who makes effort to enable others to look outside their own role, see things from a different perspective and bring that wide-angle perspective back into the organisation is a leader. In the fast moving world, there can significant differences between the “real picture” and the “perceived view”.

Irving [15] stated “Group-thinking” attitudes can lead to people overriding their motivation to realistically appraise alternative courses of action.

Tombaugh [119] asserted traditional management techniques and change management interventions are deficit-based where the focus is often on “fixing” what is wrong by solving problems. Tombaugh asserted that positive leadership and strength-based approach to long-term organizational change can have greater impact on performance and profitability. He found positive leaders developed traits such as optimism, self-confidence, compassion, emotional intelligence, loyalty and trustworthiness and they promoted a strength-based organizational culture that emphasised possibilities rather than problems. The idea of learning from the positive aspects of performance seems at odds with traditional management techniques where managers see themselves as “problem-solvers”, whose job is to “fix what’s broken” in the organisation. These managers do not make effort to learn from what is working and, in the process, amplify

them. Tombaugh found that the development of strength-based, positive organisational culture began with strong positive leadership.

Tombaugh also asserted that there is little in business literature to guide managers interested in the development of positive change leadership skills. Positive change leaders must move beyond the traditional management and leadership styles and develop new skills and traits that support strength-based organisational cultures.

Losada et al [120] examined communication patterns of change management teams in strategic planning and found the single most important factor to predicting profitability and customer satisfaction was the ratio of positive comments to negative comments amongst team members. Positive comments show support, helpfulness and appreciation. Negative comments express disapproval, blame or criticism. Their conclusion was “we need to have teams within organisations that are able to tap into the liberating and creative powers of positivity”.

The study by Losada et al suggested that optimistic change leaders are more likely to see problems as challenges, exert greater personal effort for longer periods to reach their goals and seek out and appreciate the positive aspects of difficult situations. Their research showed that successful leaders have high levels of emotional intelligence and the ability to understand and deal with their own emotions as well as those of others. They were more flexible and adaptive in their responses to stress and change and were better able to develop strong working relationships that promoted trust and fairness. They were creative in supporting change cultures that emphasised possibilities.

Cameron [24] asserted that positive leadership refers to the application of positive principles arising from the newly emerging fields of positive organisational scholarship, positive psychology and positive change.

3.8 CHAPTER OVERVIEW

This chapter developed focus on change management from a people centred perspective to create the realisation that the failures of corporate change initiatives may be due to negative employee attitudes towards the change.

Employee's attitudes in workplaces are shown to influence organisational culture.

As success of change initiatives depend both on the "hard" approaches (strategy, structure, systems and technology) and "soft" approaches (visions, values, behaviour and attitudes), this chapter focused upon "soft" approaches to develop an understanding of positive leadership and strength-based approach in change initiatives.

About 70 percent of all change initiatives fail due to a variety of people-related reasons. Positive leadership based on optimism and emotional intelligence is identified as two important traits in change leaders that can lead to successful change outcomes.

The next chapter reviews people collaboration in an effort to raise awareness of the need for positive people collaboration to complement systems integration for successful change management outcomes.

Chapter Four

PEOPLE COLLABORATION

**How can one individual solve the problems of the world?
Problems can only be solved if one is part of a team.**

Nelson Mandela [122]

4.1 INTRODUCTION

Chapter three shifted the focus to leaders and collaborators involved and affected by change management initiatives. The emphasis of this chapter is to evaluate the “value” of people collaborative relationships in change management initiatives.

Medori [123] stated that even though there is no one definition of World Class Manufacturing (WCM), there is general consensus that it includes: Total Quality Management, Just-In-Time, Employee Involvement and Team working, Flexibility, Close Supplier Links, Total Productive Maintenance, Continual Improvement and Performance Measurement. This implies that WCM, too, encompasses systems integration and people collaboration.

Butler, M [38] reflected that collaborating should not be thought of as software or a piece of technology. It is an activity or process that inherently involves people as customers, partners and members of the supply chain. Collaborating brings employees from all sectors in the organisation together to share and use information effectively.

Collaborating to share knowledge, information and learning may reduce the fear of change and uncertainty.

4.2 CHANGE AND UNCERTAINTY

Chopra [124] asserted that change is not an option in a world where everything and everyone is intrinsically inter-connected. Change is the method by which the world continuously renews itself. Uncertainty is a perception resulting from personal fears of not being able to accommodate changes. Fear is an emotion experienced when faced with the certainty of a negative impact.

Koh and Saad [71] noted that despite the wide range of uncertainties examined little research have been made to identify the underlying causes for uncertainty and that the influence of the operating environment is often ignored.

The next section examines on how people's collaborative activities and information sharing can reduce uncertainty.

4.3 COLLABORATIVE ACTIVITIES

“People must be empowered to share information and communicate with each other” stated Koch [125]. He added that in reality employees do not always collaborate effectively for various reasons. The most common reason, he suggested, was not understanding or experiencing the benefit of collaborating. Organisations must enable employees to understand the need and benefits for change to overcome their fears of change. Forcing change upon employees can lead to resistances.

Koch [125] quoted a recent Deloitte Consulting survey of 64 Fortune 500 companies where one in four admitted suffering drops in performance when their Enterprise Resource Planning (ERP) system went live.

Butler [38] asserted that Material Requirement Planning, Manufacturing Resource Planning, ERP, Business Process Management and Services Orientated Architecture systems are best practices for routine transactional processing activities such as sales, purchasing, finance, manufacturing and warehousing. To get the most from the software, Butler stressed the importance for people inside the organisation to understand and be fully committed to changing their mindsets, acquire relevant knowledge and skills, collaborate with staff across the organisation and make personal efforts to adapt to the new working methods outlined by the software.

Butler [38] asserted that getting people inside the company to use software is by far the hardest challenge and when people resist, change management initiatives either fail or under perform.

4.4 COLLABORATIVE PEOPLE RELATIONSHIPS

Ledwidge [118] asserts that employees represent 80% of the value of organisations.

Spence [126] defined collaboration is a recursive process where two or more people or organisations work together in an intersection of common goals — for example, an intellectual endeavor that is creative in nature—by sharing knowledge, learning and building consensus. Most collaboration requires leadership, although the form of leadership can be social within a decentralized and egalitarian group. In particular, teams that work collaboratively can obtain greater resources, recognition and reward when facing competition for finite resources. Collaboration is also present in opposing goals exhibiting the notion of adversarial collaboration, though this is not a common case for using the term.

A functioning family unit may become a metaphor of a collaborative team where understandings exist. Members are respected and accepted for their unique specialities. The different roles of each member contribute to the overall needs of the whole family team. Collaborating is assisting each other for the common good of the family unit.

Small businesses tend to collaborate well because employees know each other well enough to understand and assist each other for mutual benefit.

As organisations grow, segregation of staff within departments may lead to creation of departmental barriers resulting in “islands” of information within them. Staff loyalty may become polarised around departmental requirements rather than the overall needs of the

organisation. Rivalry between departments may occur. Benefits of teamwork erode as people begin to experience restrictions and barriers to share information and experiences.

The next section reflects upon the researcher's successes as well as an established collaborative people relationship practiced in Japan, which may be attributed to positive people collaboration.

4.5 SUCCESSFUL COLLABORATIVE PEOPLE RELATIONSHIPS

Japanese management practices succeed simply because they are good management practices. This success has little to do with cultural factors. And the lack of cultural bias means that these practices can be – and are – just as successfully employed elsewhere.

- Masaaki Imai [94]

The attainments of the Japanese in the fields of science and technology may be attributed to their corporate employee-centric approach in improving the value of the business.

Empirical working experience from a wide range of industries including manufacturing, education, local government, software houses, London Lloyds insurance and small businesses indicated that positive collaborative people relationships together with Business Process Reengineering (BPR) can contribute to organisational success. Successful organisations are those that enable their employees to establish positive relationships for mutual gain.

Since 1976, the relative success of the researcher's change management initiatives may be due to his efforts in developing systems with active user participation across departmental barriers and enabling users to assume ownership of the systems.

With continual improvements, often requested by users, the users experienced the value of their collaboration and participation as time-consuming, mundane, error-prone and repetitive tasks were gradually replaced. Fear was not experienced because users understood the change. Where data input errors were made, error trapping routines were incorporated. Repetitive activities were minimised.

Only available resources were used to minimise financial investments and avoid the need for financial justifications or budget reallocation. Change management initiatives were bespoke and implementations were evolutionary at a pace that ensured employees were ready for each new phase of the change initiative. Positive relationships with employees throughout the organisation ensured employees were aware of the “total picture” of the organisation’s aspirations, risks and opportunities.

Turnbull [68] remarked that “Little tweaks all through the system will eventually build up to sweeping changes”. This was the approach taken by the researcher to implement incremental solutions that included everyone and at a pace that suited everyone to avoid resistances to change. Knowledge transfer, too, was affected concurrently and paced at the appropriate level and speed to the strategy was generative. Active participation enabled most employees to experience the benefits of the change.

The next section reviews “Kaizen”, an established practice of collaborative people relationship at work.

4.5.1 Kaizen

Imai [17] stated that the aim of KAIZEN is to increase productivity, speed, quality and profits with minimal cost, time and effort. The concept of KAIZEN is to make simple, common sense improvements and refinements to critical end-to-end business processes supporting the overall continuous improvement (CI) strategy of the organization.

Kotelnikov [128] stated that “Kaizen” means “improvement”. Kaizen strategy calls for never-ending efforts for improvement involving everyone in the organisation – managers and workers alike.

Laurie [129] described Kaizen as a Japanese concept of total quality approach based upon continual evolutionary changes with considerable responsibility given to employees within certain fixed boundaries. It is aimed at improving current standards. With established policies, rules, directives and standard operating procedures (SOPs), effort is made towards ensuring that every authorised person in the organisation is able to follow the SOP.

Kaizen attainments are achieved through a combination of discipline and people development. Kaizen concentrates at improving the process rather than achieving certain results. This is the managerial attitude that makes a major difference on how organisations master change to achieve improvements. Employees are empowered by involving everyone in Kaizen. Employees’ efforts contribute to improvement in projects and schemes are given due recognition as the important aspect of this suggestion system is to continuously upgrade current standards.

Laurie [129] summarised that the Kaizen's starting point is to set the following mindset in the employees:

- Everyday must see some improvements being made somewhere in the company.
- All activities should eventually lead to increased customer satisfaction.
- Quality first, not profit first to ensure customer satisfaction.
- Recognise that problems and obstacles always occur. Hence the need to establish a culture where everyone can freely admit their problems and suggest improvements.
- Problem solving is seen as being cross-functional and systemic, requiring a collaborative approach.
- Establish a system that supports and acknowledges people's process-oriented efforts for improvement.

Laurie [129] listed key Kaizen practices, with regards to collaboration and changing people's mindset and culture, as:

- Customer orientation
- Quality control (QC) circles
- Suggestion system
- Discipline in the workplace
- Small-group activities
- Cooperative labour-management relations
- Total quality control (TQC) and
- Quality improvement.

4.6 CHAPTER OVERVIEW

The objective of this chapter has been to highlight that it is employees who deliver value for their organisations and that implementation of integrated technological systems must go hand in hand with nurturing positive collaborative employee relationships.

How well employees collaborate to share information, skills, knowledge and experiences influences the value of change management systems in reducing costs and improving quality, reliability and demand for the organisation's services or products.

Change is presented as the way the world continuously renews itself. Hence there is the need to be flexible in embracing changes. Successful change management initiatives should seek to change employee's mindsets because change and uncertainties can have negative impacts upon the success of the initiative.

Kaizen is introduced to illustrate a practical example of success that may be attained when employees are enabled to collaborate and contribute towards continuous improvements in organisations.

The next chapter reviews people intelligence.

Chapter Five

PEOPLE INTELLIGENCE

Failure is not falling down. Failure is not getting up

Janki, D [130]

5.1 INTRODUCTION

Chapter 4 stated the need to complement systems integration with people collaboration for successful change management outcomes. Failures or underperformances in change initiatives were identified as being not involving employees and not taking the initiative to ensure that relevant employees understand the change initiative.

Inquisitiveness, personal perspectives and the ability to engage and influence others are functions of an individual's 'intelligence' developed with education, training and interacting with other people.

This chapter introduces human intelligence. Understanding human intelligence is the pre-requisite for understanding Appreciative Inquiry (AI) introduced in the following chapter.

Janki, D [130] advocated the balance of the 3Hs: Head; Heart; and Hands to imply that physical actions performed with hands must be dictated by both love in the heart for others and the logical analysis of the head in addressing the current situation. Janki referred to love as the desire to make personal efforts for the benefit of others.

5.2 INTELLIGENCE

Intelligence may be categorized as:

- Intelligence Quotients (IQ)
- Multiple Intelligence (MI)
- Emotional Intelligence (EQ)
- Spiritual Intelligence (SQ)

5.2.1 Intelligence Quotient (IQ)

Intelligence Quotient (IQ) [131] is a score derived from one of several different standardized tests designed to assess intelligence. IQ scores have been shown to be associated with such factors as morbidity and mortality, parental social status and to a substantial degree, parental IQ. While its inheritance has been investigated for nearly a century, controversy remains as to how much is inheritable and the mechanisms of inheritance are still a matter of debate.

5.2.2 Multiple Intelligence Theory (MI)

Gardner [132] defined multiple intelligences (MI) as overlapping layers of intelligence where core components of MI are:

1. **Linguistic Sensitivity** - displayed by writers and orators

This relates to sounds, structure, meanings and functions of words and language.

2. **Logical-Mathematical Sensitivity** - displayed by scientists and mathematicians

This relates to the capacity to discern logical or numerical patterns; ability to handle long chains of reasoning.

3. **Spatial Capacity** - displayed by artists and architects

This relates to perceiving the visual-spatial world accurately and performing transformations on one's initial perceptions.

4. **Bodily-Kinesthetic Ability** - displayed by athletes and dancers

This relates to controlling one's body movements and handling objects skillfully.

5. **Musical Ability** - displayed by composers and performers

This relates to producing and appreciating rhythm, pitch, and timbre; appreciation of the forms of musical expressiveness.

6. **Interpersonal Capacity** - displayed by counselors and political leaders

This relates to discerning and responding appropriately to moods, temperaments, motivations, and desires of other people.

7. **Intrapersonal Access** - displayed by psychotherapists and religious leaders

This relates to being aware of personal feelings and the ability to discriminate one's emotions and knowledge of one's own strengths and weaknesses.

8. **Naturalistic Ability** - displayed by naturalists and environmentalists

This relates to perceiving the environment and the ecosystems; knowledge of relationships in nature.

Gardner [132] stated that MI may be viewed as the “gifts” most people possess in greater or lesser amounts and that each may be developed further.

5.2.3 Emotional Intelligence (EQ)

Bradberry et al [133] stated that Peter Salovey (Dean at Yale University) and Jack Mayer published the first scientific definition of EQ.

Goleman [112] developed the concept of EQ that is about:

- Knowing what is being felt and being able to handle those feelings effectively.
- Motivating self, being creative and performing at peak performance.
- Sensing what is being felt by others and to handle relationships effectively.

Goleman [112] listed the following people skills facilitated by EQ:

- **emotional literacy**

The ability to perceive emotions in self and others – the ability to read body-language is particularly important in social interactions.

- **consequential thinking**

The ability to look at possible results and make decisions that would lead to more positive outcomes.

- **navigate emotions**

The ability to engage in positive relationships that transform personal emotions to get better results.

- **empathy**

The ability to relate to other people's emotions.

- **pursue noble goals**

The ability for learning to make decisions that is in integrity with real goals, values, principles and purposes.

Goleman [112] asserted that the above EQ skills are due to combinations of the following interpersonal and intrapersonal intelligence that can be increased through education and relationships:

- **Self-awareness**
- **Personal decision making**
- **Managing feelings**
- **Handling stress**
- **Empathy**
- **Communications**
- **Self-disclosure**
- **Insight**
- **Self-acceptance**
- **Personal responsibility**
- **Assertiveness**
- **Group dynamics and**
- **Conflict resolution.**

Goleman [112] explained that everyone has emotional intelligence (EQ), just like everyone has "mathematical intelligence". Like mathematical skills, some people developed their skills whilst others may have had innate abilities.

In the context of working with EQ, Goleman [134] asserted that as the rules for work changes focus, employees are being judged by a new 'yardstick' that includes:

- How smart the employees are?
- What training the employees have had?
- What experience have the employees acquired? and
- How are the employees able to handle self and others?

Goleman [134] asserted EQ is about people character, personality, soft skills and competence. Goldman's research and that of different experts have established that EQ is needed on virtually any job. Goleman stated "IQ takes second position to EQ in determining outstanding job performance." There is Neuroscience evidence to support Goldman's claim.

Goleman [134] explained that EQ is largely learned and continuously developed with new experience. Goleman's analogy is to equate EQ with 'Maturity'. Goleman quoted an executive at Telia, the Swedish Telecommunications company, who remarked "Companies will not compete with products alone but by the way their employees are used." Goleman also quoted a 1997 survey by the American Society for Training and Development that found 4 out of 5 companies promoting EQ in their employees but showed poor efforts in encouraging the use of EQ.

Coleman [134] found that whilst the average people IQ have risen since 1918, EQ however has declined as is evidenced by increasing loneliness, depression, anger,

unruliness, nervousness, worry, impulsiveness and aggression. He stated the generation that fell behind in EQ had entered the workplace and this is evidenced by about 50% of new employees who lacked motivation to learn and improve, 40% who did not co-operate and about 8% who lacked self-discipline.

Downing [135] confirmed Goleman's statement that people's emotions and learning are important within an employment context.

Cooper [136] also confirmed Goleman's findings when he quoted Nick Zenuik, a former leader of an executive team at Ford Motor Company: "EQ is the hidden competitive advantage. If you take care of the soft stuff, the hard stuff takes care of itself".

5.2.4 Spiritual Intelligence (SQ)

Draper [137] stated that SQ is the part of human intelligence that is rarely accessed due to the belief that it plays no part in the scientific, secular age. Draper explained that SQ relates to living in the ‘flow’, the mysterious place where life can proceed without questions and answers for a new way of being. Draper described the four stages of SQ as:

- **Awakening** to be become aware of new possibilities.
- **Seeing afresh** to see the world through fresh eyes/perspective.
- **Living the change** to transform and live differently.
- **Passing it on** to pass on the benefits of own transformation to others.

Zohar [138], the Oxford academic, philosopher and spiritual writer who coined the phrase ‘Spiritual Intelligence’ in 2000 defined Spiritual Intelligence as a term used to indicate a spiritual correlate to IQ (intellectual intelligence) and EQ (emotional intelligence). She argued that SQ can help bring meaning and purpose to work and the world.

Zohar [27] described SQ as the intelligence that rests in that part of the brain that is connected to wisdom from beyond ego or conscious mind; it is the intelligence that recognises values and creatively to discover new values.

Zohar [27] used the analogy of computers to explain IQ. With high IQ, computers know the rules and follow them without making mistakes. Zohar used the analogy of

animals to explain EQ. Animals with high EQ have a sense of the situation and know how to respond appropriately. SQ allows humans to be creative, to change the rules and to alter the situation. SQ enables humans to discriminate, have a sense of morals, and temper rigid rules with understanding and compassion within limits. SQ enables humans to dream and aspire to rise above external constraints. In this way, Zohar asserted that SQ has transformative power to work within the boundaries of the situation whilst also guiding the situation.

From a Neurological perspective, Zohar [27] claimed that SQ operates from the centre of the human brain to integrate all other intelligences. Zohar explained that the human brains are designed to work with and support SQ, EQ and QI, each having their own area of strength and can function separately. These are the three psychological processes of the human brain. Without SQ, she cautioned, it is similar to placing a hole at the centre of self with no common source to integrate or transform either reason or emotion.

George [139] asserted that people need to be aware of and understand the essential interconnectedness of change. SQ is a fundamental intelligence because it addresses the interconnectedness of everything that directly and indirectly relate to people. The challenges are to overcome the “novelty effect”, reverse the “entropic principle” and diminish the overwhelming forces of people’s egoistic tendencies. George advised the need to understand and resolve the tensions at all levels of change i.e. the tensions between force and power, resistance and acceptance, enforcing and encouraging, telling and asking, being and doing. George [139] confirmed Alexander [35] that SQ is all about going with the ‘flow’.

5.3 PEOPLE-CENTERED CHANGE

The challenges to developing positive intelligences relates to “entropic principle” that implies gradual degradation of the “value” of people’s attitudes and actions. Change in attitudes, as asserted by George [139] begins when personal efforts are made to transform habits that are realised to be wasteful and unproductive. People-centered change also means being creative in formulating new and practical ways of addressing current situations by continual changes. This was confirmed by both Imai [17] and Draper [137].

To understand the mechanism of people-centered change in an organisational context, Chopra [124] explained using the analogy of the metamorphism of caterpillars to become butterflies. As the caterpillar matures, it begins to eat continuously and becomes blotted and eventually inactive. In the inactive stage, pockets of “Imagination Cells” appear at random and gradually link up to form a network of cells in the caterpillar. When the dormant DNA cells, with the information to create the butterfly become active, the creation of the butterfly with its beautiful wings and ability to fly begins.

People in organisations, due to the “entropy principle”, may gradually develop negative habits and wasteful practices that gradually may become the pattern of behavior causing the organisation, as a whole, to become inefficient and complacent. Organisations can become complacent and uncompetitive when internal business processes and employee attitudes do not change to keep pace with changing needs of the market.

In these situations, as described by Copra [124], a network of individuals within the organisation may emerge with the awareness for the need to change. These individuals cannot effect change until change leaders become active to facilitate the change. This project suggests that external consultants and students may assume this role of the “special DNA cells” with the knowledge and determination of change agents to work with management and employees in the change management initiative.

In the three case studies of this research, the researcher’s roles were the special “DNA cells”, agent of change, with the information, knowledge and determination to initiate change were assumed. Education provided the researcher with the necessary intelligence to acquire relevant knowledge develop technology based systems. The researcher’s EQ and SQ enabled him to relate positively and engage in collaborative relationships with employees throughout the organizations. Creating close relationships with a wide range of employees enabled the researcher to understand the specific needs of the both the employees and the organisation. This is what facilitated business process reengineering as advocated by Kaizen [17] to make continuous improvements with active collaboration.

Change management initiatives undertaken by the researcher focused on addressing identified activities and objectives before developing solutions with the users on a continuous basis. When solutions are developed with user acceptance, collaboration and participation, solutions are more likely to have a far reaching effect upon employees and the organisation. The sense of personal pride that the project belongs to employees motivates them to ensure that change initiatives are successful implemented, used and continuously improved in line with Kaizen. [17].

5.4 CHAPTER OVERVIEW

It is people's spiritual intelligence that may make them assume roles of change agents.

This chapter shifts the focus of the research to people's emotional and spiritual intelligence because this is what is required to establish collaborative relationships and change situations to become the desired situations.

After review of Intelligence Quotient (IQ), Multiple Intelligence (MI), and Emotional Intelligence (EQ), Spiritual Intelligence (SQ) is introduced as the hidden competitive advantage that organisations may develop.

A metaphor is used to explain organisational change using the analogy of the metamorphosis of caterpillars to butterflies to explain the need for the different people roles essential for most change management initiatives.

The logical step after reviewing people intelligence is to review Appreciative Inquiry (AI) in the next chapter since it relies upon both EQ and SQ.

Chapter Six

APPRECIATIVE INQUIRY

We actually create more opposition when we assume that people will “resist” the changes we hope to make

Cooperrider [4]

6.1 INTRODUCTION

Cooperrider et al [4] defined Appreciative Inquiry (AI) as “a form of transformational inquiry that selectively seeks to locate, highlight and illuminate the life-giving forces of an organisation’s existence. It is based on the belief that human systems are made and imagined by those who live and work within them. AI leads toward the creative images that reside in the core of organisations. This approach based on solid, proven principles for enabling creativity, knowledge and spirit in the workplace calls people to work towards a common vision and a higher purpose. AI seeks out the best of “what is” to help ignite the collective imagination of “what might be”. The aim is to generate new knowledge that expands the “realm of the possible” and helps members of organisations to envision a collectively desired future. Furthermore, it helps to implement visions in ways that successfully translate images of possibilities into reality and beliefs. This methodology results in a win-win situation”.

Cooperrider et al [4] asserted that the assumption of AI is “Every organisation has something that works right – things that give it life when it is most alive, effective, successful and connected in healthy ways to its stakeholders and communities. AI begins by identifying what is positive and connecting to it in ways that heighten energy, vision and action for change. AI is a process of engaging all relevant and interested people in positive change.

Cooperrider et al [4] stated “The most important things we do as leaders and consultants is inquiry. Reading situations, doing analysis and diagnosis all start with inquiry. The key point is that the way we know is fateful. The questions we ask, the things that we choose to focus on and the topics we choose to ask questions about determine what we find. What we find becomes the data and the story out of which we dialogue about and envision the future. So, the seeds of change are implicit in the very first questions we ask. Inquiry is intervention.”

Goldberg [140] had earlier confirmed that AI is becoming an attractive philosophy for organisational change and development. AI methodology primarily had been focused on team development and has broader practical applications. Goldberg’s observed a common thought amongst an assortment of organisational theorists, scholars and practitioners was “the way we think about something actually makes a difference”. Cooperrider et al [4] confirmed this earlier observation of Goldberg.

Fryer [141] noted that in the competitive business environment, there was strong evidence to suggest that positive leadership, a strengths-based organisational culture and appropriate “soft” change management methodologies, such as AI, can help

organisations meet their ever changing business goals. Fryer stated “companies where the focus is on amplifying positive attributes in employees such as loyalty, resilience, trustworthiness and compassion – rather than combating the negatives – performs better financially and otherwise”. Fryer also remarked “a positive workplace atmosphere is worth developing ... and may be the foundation of true organisational success”.

Fryer [141] listed the following evidences of organisational successes based on developing positive workplace environments:

- Financially successful Southwest Airlines had an established track record of excellent organisational performance as well as high employee and customer service satisfaction. It remains the envy of the airline industry.
- Cosmetics mainstay, Avon, shifted its focus from sexual harassment training to identifying positive examples of men and women successfully working together. Their efforts resulted in greater numbers of qualified women assuming leadership positions, increased profits, and received an award for improving gender relationships in the workplace.
- Trucking giant, Roadway Express, took a strengths-based approach to building employee involvement to increase workflow efficiency. Self-organised employee project teams identified the company’s core capabilities and used these to develop ideas that resulted in savings of over \$ 10,000 per month.

- Lovelace Hospital, in Albuquerque, New Mexico, suffered from short staffing, poor teamwork and skyrocketing recruitment costs for nurses. Rather than bemoan their “turnover problems”, management took a positive approach in identifying why nurses enjoyed working at the hospital. New policies and procedures were implemented that better reflected the strengths of the hospital and its workforce. As a result, the hospital experienced a 13 percent reduction in staff turnover the first year, a 30 percent reduction in the overall nurse vacancy rate, improved morale among nurses, and increased patient satisfaction ratings.

Bohm [142] asserted that “an appreciative frame” of reference is just as crucial as inquiry where inquiry is the key element of “dialogue”. Dialogue is the process by which individuals explore each others unique “ways of thinking” – assumptions and mindsets – in order to arrive at deeper levels of understanding of both the organisational process and the people. Unlike other communications disciplines, inquiry is about:

- Asking questions from a standpoint of genuine curiosity;
- Being willing to delve behind surface conclusions by exploring how those conclusions were arrived at;
- Examining one’s own and others’ assumptions out loud; and
- Being open to revising one’s thinking based on new information.

Cooperrider et al [4] asserted that the following appreciative assumptions facilitate the inquiry process:

- Appreciate that development happens in organisations and that some people may not be aware of it.

- That the organisation could do better at developing further what it is currently doing.
- That training is only one part of the development strategy. The focus should be to integrate AI into peoples' everyday work lives.
- Requires a shift in mind-set that development is more than just training.

Bushe G.R., [143] asserted that consultants and managers seem to get blinded by the “positive stuff” in appreciative inquiry (AI) and did not seem to understand the importance of generativity, as an input and outcome of AI. Bushe further asserted that AI must be generative in the quest for new ideas, images and theories to make available decisions and actions that weren't available or didn't occur. Bushe added that when successful, AI generates spontaneous, unsupervised, individual, group and organisational action towards a better future and his research suggested that generative AI is transformational in leading to new ideas and leading people to choose new actions. In the process, organisation's culture can change and remain changed. To design and facilitate AI effectively, Bushe recommended building the following generative activities into every activity:

- Generative questions;
- Generative conversations; and
- Generative action.

6.2 APPRECIATIVE INQUIRY METHOD

Cooperrider et al [4] and Goldberg [140] confirmed that AI is the methodology for discovering, understanding and supporting change in individuals, teams and organisations.

Cooperrider et al [4] asserted that AI is a partnership between Appreciation and Inquiry with a set of defined assumptions:

6.2.1 Appreciation

- Act of recognizing the best in people or the world around us;
- Affirming past or present strengths, successes and potentials; and
- Perceiving those things that give life to an organisation.

6.2.2 Inquiry

- Act of exploration and discovery;
- To ask questions to understand; and
- To be open to new potentials and possibilities.

6.2.3 AI Assumptions

Appreciative Inquiry works from a set of assumptions such as:

1. In every society, organisation or group, something works;
2. The act of asking questions of an organisation or group influences the individuals in the group in some way;
3. Asking questions about how they perceive the current situation and how they would like the future to be. This helps to build up a picture of that future. This approach helps to focus upon the possibilities of the future rather than trying to right the wrongs of the past;
4. The tendency at turning points or crises is to look at what is not working efficiently, fast enough or cheap enough and identifying possible fixes. By recognising current difficulty and previous successes, “employees become more competent” and willing to address the issue;
5. Employees develop the courage to accept responsibility and start to discover and carry forward the best of the past. By doing this, employees become confident of their ability to sustain peak performance.

6.3 PRACTICAL EXAMPLE OF APPRECIATIVE INQUIRY

Blair [144] reported that leading educational psychologists at the Liverpool John Moores University found praising pupils allowed teachers to turn unruly classrooms into well-ordered ones. Blair quoted an observation where when teachers praised good behaviour – rather than just good work – and ignored indiscipline, 94% of pupils obeyed their teachers because most people respond well to praise.

The positive changes observed could not be adequately measured but some explanations were:

1. Every pupil has several positive behaviours and skills that can be appreciated and amplified.
2. When pupils are unruly, the tendency is to focus upon their negative behaviour which may have been influenced by the teacher's attitude towards them. When the teacher's attitude changes to become more positive towards their pupils, pupils may respond accordingly.
3. The act of asking questions out of a genuine desire to help and assist may have positive influences upon the pupils.
4. The questions must not be structured to address the wrongs of the past but rather to enable the pupils to visualise the potential for a positive outcome and the possibilities for the future.
5. Pupils are more likely to be more responsive and perform better when they build upon their successes.

6.4 CHAPTER OVERVIEW

Appreciative Inquiry (AI) built on emotional intelligence (EQ) is becoming an attractive philosophy for organisational change. AI is a people-centric approach that uses EQ principles to enable people to collaborate and amplify attainments to improve performances.

The AI methodology aims to avoid perceiving situations as problems and obstacles. Emphasis is on learning opportunities to progress with people's natural abilities to find new ways to improve. The metaphor of "phototropism" may be used to associate AI methodology's potentiality in encouraging growth and continuous improvements.

Organisations that employ AI may perform better. Four case histories of US organisations that have attained significant successes are included together with one in UK before this chapter overview.

The next three chapters are longitudinal case studies of three different change management projects undertaken by the researcher over a 33 year period that were relatively successful in implementing state-of-art technological systems and in nurturing organisation cultures based on the foundations of positive leader, emotional intelligence, spiritual intelligence and appreciative inquiry for continual improvements.

No other factors or projects were undertaken simultaneously either at management or support levels or by consultants, students or contractors that may have impacted on improvements.

Chapter Seven

CASE STUDY A - Container Manufacturer

Knowing others is intelligence; knowing yourself is true wisdom

Lao Tzu [145]

7.1 INTRODUCTION

This case study relates to a change management initiative undertaken by the researcher in a Small to Medium Enterprise (SME) [30], referred to as CA¹ that had been in the business of manufacturing enclosures such as cork stoppers and bottle caps since 1884.

This longitudinal case study, spanning 6 years from 1976 to 1982 reflects upon the generative strategies [14] used by the researcher that may be collectively compared to current understandings of positive leaders, Kaizen, emotional intelligence, spiritual intelligence and appreciative inquiry to involve management and employees to accept, collaborate and participate in business process reengineering initiatives for continuous improvements.

¹ Actual name is withheld to comply with Data Protection Legislation.

In June 1976 the researcher first reported at the premises of CA for his 6-month industrial training placement for his BSc (Hons) sandwich course in Mechanical Engineering.

Business processes and equipment that were “state-of-art” in 1890 were still in use in 1976. Management and employees were aware of current challenges and competitions but for various reasons, they had not responded appropriately. The outcome was that CA became relatively “traditional” or “old fashioned” in its internal business processes and external business activities. Significant production and management time were being spent in “fire-fighting” activities to address financial, production and logistical situations.

The researcher’s personal assessment was that management-employee relationships were positive. Though CA was at the top end of an SME [30] with about 200 employees, it had managed to maintain positive management-employee relationships. The leadership and management style may have contributed towards the low staff turnover rates.

The management-employee relationships of knowing, caring and interacting with each others meant that approaches similar to positive leadership, emotional Intelligence, spiritual intelligence and appreciative inquiry were being practiced.

7.2 BARRIERS TO CHANGE

CA's past success may have become barriers to change as they continued to do what they had always done. The academic qualifications amongst management and employees were relatively low. Most management, office and production staff had been employed in the organisation since they left school. There was in-house training to acquire relevant skills but this did not lead to keeping up to date with changes in management or technology. What was lacking was training needed to acquire new skills in management and production systems which resulted in CA becoming uncompetitive to the extent that the hourly production rates of competitors were equivalent to CA's daily production output. This made their products relatively expensive with long delivery times.

Not only were the costs of CA's products astronomically high in comparison with local and foreign competitors, CA was not in the position to produce the volume or types of products required by the packaging industry. In the packaging industry that CA was involved, the emphasis had shifted to the more aesthetically pleasing and cost effective plastic containers. CA, however, was restricted to sheet metal productions. For health and safety reasons, CA's traditional enclosures were no longer suitable as enclosures for the food industry because they could not be adequately sterilized. The food industry had been their main source of revenue.

Management and the employees had not made personal efforts to update their knowledge and skills to take advantage of technological and management advancements to remain competitive.

7.3 CASE STUDY DESCRIPTION

Without prior exposure or experience in manufacturing, the researcher had to acquire relevant skills and experiences by establishing relationships with management and employees and getting involved in a wide range of management and production activities. He learnt by talking, asking and listening to management and employees. This led to his later successes.

The researcher's role as a student on placement gave him access to most departments and effectively made him the "link" between management and production staff. Being the "link" made him aware of the wide range of concerns and possible solutions. His personal motivation to use his academic knowledge contributed to developing practical solutions with users.

User acceptance, collaboration and participation in the change initiatives were never an issue because everything done was a team effort from initial conception to implementation and use.

Taking a combination of positive leadership, emotional intelligence, spiritual intelligence and appreciative inquiry approaches, the researcher focused on the attainments made by management and employees. This indirectly led to the realisation of current concerns and their potential solutions.

Taking the “Kaizen” approach, the researcher used his earlier successes to continuously implement small improvements that over the 6 year period led to integrated computer aided systems with functionalities comparable to current ERP systems.

As the researcher diligently took ownership of schemes to solve negative situations, both management and employees became appreciative of the researcher’s initiatives. Their appreciation and collaborative relationships enabled the researcher to maintain the momentum of his change initiatives.

As managers and employees assumed ownership of the change initiatives, two important things happened.

- 1 Users’ personal understandings led to their collaboration and participation in other continuous improvement initiatives across CA.
2. User’s personal understandings made them less dependant upon the researcher which freed him to initiate other change initiatives across CA for continuous improvements.

It was the researcher’s flexibility and informal approach with management and employees throughout CA that enabled him to extend the variety of change initiatives. By taking a flexible approach, the researcher just “went with the flow” (the spiritual intelligence approach). He did not have to hard sell or compel anyone to accept his solutions. By actively listening to management and employees problems, he was able to focus upon developing practical and acceptable solutions. The content and style of the

solutions were the result of management and employees their perception (the appreciative inquiry approach).

Securing management and employee acceptance, collaboration and participation using emotional and spiritual intelligence together with appreciative inquiry strategies made it relatively easy to implement the technological systems that the researcher designed and implemented to improve productivity and reduce costs.

Informal two-way communications throughout CA often led to recognition of business activities that were no longer needed and business processes that could add value. This was the basis of continuous improvements.

For example, there were no systems for order processing. This directly meant that there were no systems for purchasing, stock control, production scheduling and related business processes. When clients phoned to progress their orders, the organisation would suspend current production processes in favor of the “emergency” orders. Without relevant records, most of suspended work-in-progress orders led to replacement orders when their progress was enquired. This led to significant production wastages at CA when work-in-progress was not managed effectively.

No other factors or projects were undertaken simultaneously either at managerial or support levels or by consultants, students or contractors that may have impacted on improvements.

Improvements were not measured because there was no need to report the quantitative value of improvements made. Management and employees were aware of the financial and qualitative value of the improvements made. The researcher's involvement over the 6-year period is testimony of the real value of the project.

Following the "Kaizen" approach, the researcher developed and implemented systems in small discrete phases for continual improvements. These phases were small enough for users to understand. This led to their acceptance, collaboration and participation in the development, implementation and usage stages. Subsequent phases were built upon the success of previous phases.

Phase 1 of Project

The researcher first implemented relevant paper-based information recording systems, with active employee involvement, to help them reduce the chaotic business situations at CA. The manual sales order progressing and work in progress systems went a long way towards establishing planned production schedules and improve customer relationships. An immediate benefit experienced by management and employees was the more managed working environment as employees collaborated to share information, understand each others roles and co-operate with each other. Improved teamwork and less "fire-fighting" contributed to enabling employees and management to take a reflective approach in continuous improvement activities with the researcher.

Phase 2 of Project

Establishing positive employee collaborations led to employees realizing that some orders could have been satisfied with products already in stock. Hence their involvement in in-house BPR activities led to the implementation of a manual control system to check if new orders could be completed ex-stock. The researcher's contribution was to provide CA employees' with the tools. They made efforts to perform the stock management activities. This manual exercise was successful because it was a personal initiative by stock controllers that created personal pride for their efforts in assisting CA to reduce costs and improve working conditions.

Phase 3 of Project

The manual stock control system later evolved to become a computer-aided stock control system and inventory management system. Identification of CA's "Standard" products and their annual turnover led to in-house BPR activities to produce "Standard Stock" items during slack periods to improve the utilization of CA's manufacturing resources. This helped reduce fear and anxiety experienced by management and employees during slack periods. Simple systems were implemented and continuously improved.

Phase 4 of Project

Accurate information recording systems and collaborative in-house BPR activities led to improving related processes such as the stock management of sheet metals needed

for the production of the enclosures. Efforts made to rationalize variations of products resulted in reduced inventory holding costs and machine set ups.

Phase 5 of Project

In 1977, management and employees in CA appreciated the benefits of IT systems when the researcher used the Thames Polytechnic (Greenwich University) mainframe computer to generate lookup tables that listed the production yield of all CA's products for each standard sheet size that was stocked. This led to the use of optimal sheet sizes to minimise wastages. This was not a student proposal or project. After the industrial training in 1976, the researcher was retained on a part-time basis till 1982 when he left the UK. He was retained to develop and implement continuous improvements in the organisation.

Phase 6 of Project

The next BPR initiative involved the optimal re-use of end strips were not broad enough for the final row of blanks. These end strips were automatically re-allocated for the production of the smaller blank caps to further improve sheet metal yields in the effort to reduce the cost of CA's products.

Phase 7 of Project

When microcomputers became available in the UK around 1978, the researcher developed computer-aided systems to automate each of the manual systems that he had

successfully implemented with active employee collaboration. The immediate benefits experienced by office employees were reduced routine manual effort, improved speed and accuracy of outputs.

Phase 8 of Project

Collaboration between production and finance employees led to integrated systems that led to the reduction waste, reduced inventory levels and implementing economic order quantities.

Other computer-aided systems that were progressively developed, implemented and integrated included:

- Order Progressing;
- Product Stock Management;
- Sheet Metal Stock Management;
- Optimal Material Utilization and Allocation;
- Sheet Metal Cutting Schedules;
- Press Shop Production Schedule;
- Product Costing;
- Payroll; and
- Invoicing.

7.4 CASE STUDY ATTAINMENTS

By 1980, the researcher was successful in implementing one of the first Local Area Network systems in the UK based on a North Star Horizon microcomputer. He implemented his Integrated Manufacturing Management System (IMMS) which evolved over the 6 year period.

By 1982, active collaborative activities of the employees, grounded on Positive Leadership, Kaizen, Emotional Intelligence, Spiritual Intelligence, and Appreciative Inquiry enabled systems at CA to be continuously evolved to include functionalities similar to ERP systems.

Payroll and invoicing, two essential transactional processing activities, made it easier for management to justify the financial investment. The researcher's microcomputer based system initiative replaced the Burroughs accounting system that was relatively outdated and expensive to maintain. Proposals, developments, implementation, documentation and user training were done by the researcher. The success in the use of his systems to add value to the organisation was entirely due to the positive collaborative relationships of management, office staff and production employees that evolved to become the organisational culture to reap the power of team working.

To reap the benefits of team working, the researcher established informal relationships between employees and management, throughout CA, to enable them to understand their different needs. Collaboration enabled employees to become aware of the needs of others, share business information and take an active part in the in-house BPR change

management initiatives. This is a practical application of positive leadership, Kaizen, Emotional Intelligence (EQ), Spiritual Intelligence (SQ) and Appreciative Inquiry (AI) for continuous improvement.

Collaboration enabled employees to make personal efforts to ensure that their actions or lack of actions did not inconvenience others. Informal two-way discussions throughout the organisation were effectively the AI inquiry that led to BPR activities without the need for management intervention. This enabled continuous improvements to be achieved with minimal formal employee training, capital expenditure or business disruptions. This is practical application of Kaizen and AI with positive leadership, EQ and SQ.

Employee relationships, training and BPR activities were complementary, the basis of the AI methodology. The researcher involved and trained relevant employees on computing and related systems to motivate their contribution in BPR. Experience at CA also indicated that positive collaboration makes it relatively easy to train and guide employees to improve the current business processes due to their self motivated efforts to understand and share relevant information. This also results in fewer resistances to change as they became true followers of the change initiative. It is not including employees in the BPR initiatives that may lead to resistances.

Automating routine clerical processes for the benefit of employees is relatively easy if they are motivated to propose and collaborate in BPR initiatives. When employees are made aware of the operational and financial benefits of contributing to BPR activities, for continuous improvements, their suggestions would be relevant, practical and add

value for the self and the organisation. For this reason, all the change initiatives of the researcher were focused upon deriving tangible benefits for both employees and management.

The in-house software development methodology at CA enabled systems to be developed around the unique needs and abilities of employees and business. Besides capital savings, in-house software developments involved continuous interaction with business users. This project used informal practice of Kaizen, EQ and SQ principles together with the AI methodology to implement continuous improvements that were relevance to current needs. The researcher' role was as the only developer and facilitator. The project was a success because the systems and procedures addressed the needs of employees and the business. There was total acceptance.

The attainments at CA were achieved by developing direct collaborative relationships with about 20 relevant managers, office staff and production employees from different departments. Their assistance enabled the researcher to develop relevant systems for continuous improvements.

The “emergency situations” at CA were drastically reduced as the accurate information systems contributed to addressing current needs. Uncertainty leading to fear, doubts and anxiety experienced by the employees were reduced.

To sustain the change management initiative, the researcher mentored another student on placement for six months for maintenance and further improvements. This was necessary because existing employees did not have the necessary education or skills.

The benefits of the change initiative at CA did not materialize overnight. It was an evolutionary change process, requiring continuous improvements (CI). After the initial six months, the researcher was retained in a part-time capacity on weekends. As the researcher resided in Birmingham between 1978 and 1982, CA paid traveling expenses for the researcher to drive down to London and continue his CI activities at CA during weekends.

In 1982, the researcher left UK to assume the post of a Lecturer in Supervisory Management in Singapore after having secured a B Sc (Hons) in Mechanical Engineering from Thames Polytechnic, M Sc in Engineering Production and Management from Birmingham University and worked for three years as a Teaching Company Associate at Warwick University.

7.5 ERPII CHANGE STRATEGIES

7.5.1 People Strategy

Employees at CA were motivated to change by making them aware of the potential benefits which require relevant knowledge and guidance. The researcher's strategy was to interact with employees, throughout CA, to enable them to become aware of their roles and that of employees in other functions and departments. This led to their self-realisation of the financial and productivity implications of their personal efforts at CA. It is personal understandings that lead to making personal efforts to change.

Successes in the change initiatives at CA, related to the development and implementation of relevant information systems, were achieved by focusing attention to systems that result in positive benefits for self and organisation. The in-house BPR projects activities were the result of actively listening to the employees. Employee collaboration contributed to positive in-house BPR activities. Using the Appreciative Inquiry methodology, efforts were made to improve upon successes. Enabling employees to assume ownership led to their commitment to continue participation in BPR activities. This is the basis of Kaizen and the Appreciative Inquiry (AI) methodology.

By including a majority of employees, being flexible and not compelling anyone to change without personally understanding the aims and methods of the change initiative, the researcher avoided barriers to change. This strategy reduced the fear and anxiety

experienced by employees. This is the practical application of EQ and AI in the workplace.

7.5.2 Capital Strategy

CA was not “cash rich” which is one reason why it was still using outdated processes. Hence the researcher’s financial capital strategy was to take an evolutionary approach to incrementally implement changes based on established results. Further investments were based on positive attainment or on replacing obsolete systems.

Financial risks to CA were minimized by using the in-house software development methodology to automate and integrate the manual systems one at a time.

The involvement of the production manager and production supervisor, as change leaders contributed to creating value in the minds of the employees to participate in the change activities.

Training and establishing positive dialogue with most employees at CA contributed to developing the human capital by improving their understandings and experiences.

7.5.3 Information Strategy

The researcher’s information objectives were to ensure that relevant information was both available and up-to-date. Manual systems addressed the first objective while IT systems addressed the second need for dynamically up-to-date information.

When Local Area Networks and Databases became available, the integration of the various standalone systems was the logical step to their evolution to become stock control, stock management systems with some of the functionalities of MRP, MRPPII and ERP systems

7.5.4 Experience Strategy

The experience strategy used by the researcher at CA was to create “value” for the employees by enabling them to assume ownership of the systems and experience the benefits.

The most significant benefit was gaining a better understanding of the change initiative by their direct involvement. Automation of tedious, error-prone and repetitive tasks led to tangible experiences of progressing from information recording and transactional processing to actually understanding and using business information in productive in-house BPR activities.

7.5.5 Opportunity Strategy

Rather than being inundated with tedious, repetitive work and frequent “emergency” situations that created stresses at work, the opportunity strategy was focused on creating a work environment that was free from fear and uncertainty.

Collaboration and awareness of the costs of their activities, products and wastes led to reforming wasteful practices at CA.

7.5.6 Crisis Strategy

By working closely with CA's employees and establishing positive two-way dialogues to understand their hopes and fears, the researcher was able address their concerns. This is the EQ and AI strategy that avoided the need for a dedicated crisis strategy at CA.

7.5.7 Result / Reward Strategy

The result/reward strategy employed at CA was to ensure that the change initiatives, being simple and did not create fear or doubts on the employees. Reducing manual effort was always appreciated by employees and management.

7.6 CHAPTER OVERVIEW

The evolutionary changes in CA enabled the employees and management to understand and develop their skills and experiences, “on-the-job”. The use of the AI methodology enabled the researcher to learn from the employees whilst the employees learnt from the researcher. This was made possible by appreciating what were working well and magnifying them. Creating the sense of ownership and team spirit in the change initiative at CA led to positive contribution in BPR initiatives.

Evolutionary changes also meant that no formal proposals, specifications or user training were needed at CA. Most new improvements were developed on past attainments. The continual involvement of the researcher over the longitudinal period of 6 years from 1976 to 1982 is both a testimony of project’s attainment and the value of continuous improvements made.

No financial value of the attainments at CA was attempted. The project improved business processes and working conditions.

The next chapter reviews Case Study CB which was simultaneously in progress with Case Study CA between the years 1979 and 1982.

Chapter Eight

CASE STUDY B - Vehicle Manufacturer (1979 to 1982)

Try not to become a man of success, but rather, a man of value

Albert Einstein [122]

8.1 INTRODUCTION

Case study B was a longitudinal case study that overlapped case study A over the period 1979 and 1982. It relates to a vehicle manufacturer referred to as CB¹.

The researcher's individual work experience project on his M Sc course in Engineering Production and Management at Birmingham University was spent in improving the press shop management at CB. Following the success of his project, the researcher was offered the post of Research Associate in Warwick University's Teaching Company Scheme in 1979 to further his work at CB.

CB was part of very large conglomerate in the business of producing a wide range of vehicles in the UK. The main activities at the CB plant were the production of the steel

¹ Actual name is withdrawn to comply with Data Protection Legislation.

pressings, fabrication of the Body-In-White (BIW) vehicle shell and final assembly of the Freight Rover (FR) vans.

About 50 different derivatives of the FR vans were manufactured requiring different combinations of approximately 3000 different steel pressings to fabricate each van. Hence a common reason for frequent production disruptions at CB were due to stock outs of steel pressings.

Besides technical and production management difficulties that led to frequent production disruptions, CB was frequently plagued by management – employee descent. Union rules made collaborative or co-operative employee relationships almost impossible. The consequence was that each “group” of employees within CB was relatively unaware of the difficulties experienced by other “groups” within CB. Management and employees did not collaborate to share information to understand and become aware of the emerging opportunities, competitions and threats.

Even though CB and the conglomerate that it belonged to experienced frequent strikes by employees disputes over even trivial matters, the change efforts by the researcher did not attract any resistance from either the management or any of the employees in CB. This was primarily due to the trust he developed with most of them. Being a student on placement gave him access to most managers and employees. Trust was developed gradually as he participated in routine transactional processing activities and suggested continual improvements. Trust was developed as he enabled users to understand the changes and assume ownership of the change initiatives. The researcher

did not experience any resistance because he was assisting both management and employees to address their immediate problematic situations.

The first system the researcher implemented was a microcomputer based stock control system to address production disruptions due to inaccurate and out-of-date stock records. This relatively simple system replaced the tedious, slow and error-prone manual stock recording system and led to the reduction of fire-fighting situations experienced by finance, purchasing department, stock keepers and production schedulers.

As employees experienced personal benefits, they became motivated to collaborate and participate in other business process reengineering initiatives for continuous improvements. Perhaps the more important reason why the researcher was well regarded by employees and did not experience any resistances was his initiative to replace the repetitive error-prone manual system that could not cope with requirements.

In 1979, most computing resources were based on main frame computers and used exclusively by the financial department. There were no systems for non-financial transactions. Unlike most IT professionals, the researcher developed systems that addressed production problems. This was facilitated by the fact that the researcher was a mechanical and production engineer with management training who had developed his personal IT skills.

The only resistances faced were from the IT department because the researcher did not abide by the restrictive practices of the contracted out IT department. When the IT

department refused to collaborate, the researcher used the DEC PDPII minicomputer at Birmingham University to develop a production version. It addressed so many issues that CB entered a relationship with Warwick University's Teaching Company Scheme to employ the researcher and second him permanently to CA to continue his business process reengineering initiatives for continuous improvements.

8.2 BARRIERS TO CHANGE

There were several barriers to change due to the fact that this was a relatively mature organisation that had retained most of its traditional systems and procedures. The fact that it was also part of a very large conglomerate meant that additional barriers were in place.

There were significant departmental barriers within CB, compounded by the trade unions. This corporation included business units that were entirely independent organisations. For example, an independent systems organisation was in place to provide IT services for the entire vehicle group. They enforced its own procedures and policies on the nature of IT systems to be provided to each manufacturing plant within the group. An illustration of the inconsistency of management by this systems organisation was that in 1979 there were absolutely no computer-aided systems at the CB plant while the neighboring plant had very elaborate IT systems, mainly for financial applications. This organisation presented significant barriers because it viewed the collaboration between CB and Warwick University's teaching company scheme as a threat rather than an opportunity to be included in business process reengineering initiatives.

8.3 CASE STUDY DESCRIPTION

Like the parallel case study in CA, this case study also initially started as the researcher's industrial training placement.

This case study enabled CB to reduce its inventory holding costs by £ 1.2 Millions. This is the value of financial improvements that were released to newspaper journalists in 1982. The savings were attained by rationalizing steel stocks, reducing inventory and implementing Just-In-Time purchasing. The IT systems developed by the researcher were essential but the success of the implementation was due to the collaborative relationships that the researcher motivated between management and employees.

The researcher's remit was not defined. His earlier student placement in the press shop had lead to the establishment of better manual stock management of the pressings stock to address the recurring stock-out situations that created stoppages further up t he manufacturing process. This created credibility, confidence and trust when the researcher proposed other potential improvements. His relationships with several managers and employees at CB enabled him to understand their different roles and the nature of difficulties experienced. This is the basis of the Appreciative Inquiry (AI) methodology.

Use of the AI methodology was useful in securing user collaboration and participation in business process reengineering initiatives for continuous improvements. Informal dialogues facilitated understanding causes and solutions of difficulties experienced.

The most significant difficulty experienced at the press shop that led to frequent and expensive downtimes at CB was due to pressings stock-outs of any one of more than 3000 steel pressings needed to fabricate each BIW shell. The difficulty was compounded by the fact that CB fabricated about 50 different derivatives of the BIW shells, each requiring different combinations of the pressings.

From an operational point of view, it was practically impossible for any manual system to cope with the complexity, accuracy and speed required for effective production management and control.

The number of each vehicle derivative to be manufactured was uncertain, depending upon actual purchase orders and their delivery schedules. It was not possible to forecast, with any degree of certainty, the number and type of vehicles to be assembled. It was not feasible to build vehicles before receipt of committed vehicle sales orders.

In the press shop, it was not possible to update their manual, card-based, stock control system at the pace that was essential for production planning and control purposes. Only when the BIW assembly process halted due to unavailability of a specific steel pressing was there the realisation of that stock-out.

Often even the steel rolls required for the manufacture of pressings were not in stock. Whilst the press shop experienced frequent stock out situations, a lot of financial capital and storage space were locked in steel rolls and pressings that were surplus to immediate requirements because designers had specified uniquely different steel specifications and roll sizes for each of the more than 3000 steel pressings. This meant

that different steel rolls for each of the 3000 pressings had to be individually ordered and stocked.

The purchasing department was constrained to place orders for steel rolls as specified by designers together with minimum order quantities and delivery schedules imposed by the steel supplier.

As a consequence, orders for steel rolls were often made for larger than required quantities, months before they were required. Non-standard size steel rolls also cost more. The fact that the purchase orders were never based on accurate demand forecasts or actual committed orders meant that they were frequently either surplus or short of actual requirements.

The researcher attributes his understandings of the causes of the difficulties experienced to his close collaborations with employees and management throughout the company. He was able to establish informal relationships because he was not an employee and hence not subject to the usual business procedures related to staff engagement and confidentiality.

Change in CB had to be implemented with employee acceptance to avoid trade union issues. Positive relationships avoid confrontations. Small evolutionary changes were easy to justify to management and secure employee acceptance. Understandings led to acceptance, resulting in collaboration and participation in change initiatives.

The involvement of the production manager and the press shop manager, as change leaders, led to credibility of the researcher's initiatives. Without their support, it would have been difficult for the researcher to begin the process of establishing collaborative relationships and initiating business process reengineering for continuous improvements. They were the intermediary between the researcher, senior management, production staff and support employees.

No other factors or projects were undertaken simultaneously either at managerial or support levels or by consultants, students or contractors that may have impacted on improvements.

The only quantitative measurements of improvements related to the cost of inventory. No measurements of qualitative benefits were made. The testimonial from the manager in charge is the only qualitative measure of the improvements.

Following the "Kaizen" approach, the researcher developed and implemented systems in small discrete phases for continual improvements. These phases were small enough for users to understand. This led to their acceptance, collaboration and participation in the development, implementation and usage stages. Subsequent phases were built upon the success of previous phases.

Phase 1 of Project

To secure management approval of his proposals for change, the researcher had to first enable management and employees to experience the practical benefits of his proposed change initiatives. This aim was achieved by developing a stock control system on his personal PC to create that vital understanding.

Phase 2 of Project

Once management and the employees understood the practical benefits of computer-aided stock control systems, the decision was made to enable the researcher to develop a more elaborate stock management systems using Birmingham University's DEC PDP 11 minicomputer. This was because BL Systems was against this initiative.

Phase 3 of Project

To address the uncertainty related to the production of about 50 derivatives of the Freight Rover vans requiring different combinations of 3000 different steel pressings, the researcher developed his "Parts Explosion" module with his Bill of Materials (BOM) to address this need.

This module enabled the press shop to update their computer-aided stock control system by just inputting the number of each vehicle derivative manufactured rather than the number of each individual steel pressing issued to the assemble line. This change

enabled the manual activity that took more than a week to complete, with significant mistakes, to be accomplished in less than 10 minutes with absolute accuracy.

Phase 4 of Project

Develop and implement the module to simulate the potential pressings stock outs that would lead to production stoppages. With the researcher's "What If" simulation system, production schedules of vehicles could first be tested for potential pressings shortfalls. This simulation module enabled production schedules of BIW assemblies to be fine tuned to ensure availability of steel pressings. Uncertainty was reduced as production schedules were based on component availability.

Phase 5 of Project

The cost the BIW shell was computed on the basis of the cost of steel used with the collaboration of finance employees. Integration of financial and industrial engineering databases with stock management of steel pressings and steel rolls enabled CB to accurately compute the cost of their Body-In-White (BIW) shells.

Phase 6 of Project

Evaluation of the cost of steel wastes based on the current production schedules, with the help of the integrated databases. As employees became aware of the financial cost of production waste, they were motivated to collaborate and participate in business

process reengineering activities to develop and implement economic press shop production schedules.

Phase 7 of Project

Rationalisation of steel specifications helped to further reduce production wastes.

Phase 8 of Project

Collaboration of press shop, stores, purchasing, production and finance employees led to Just-In-Time purchase schedules that led to the reduction of inventory holding costs by £ 1.22 million in 1982.

8.4 CASE STUDY ATTAINMENTS

Use of IT systems with relevant change management concepts such as the use of Pareto Analysis on the cost and utilization of steel pressings together with the implementation of Just-In-Time (JIT) purchasing of steel rolls enabled CB to reduce its steel holding costs by £ 1. 22 Million per annum along with the other financial savings and operational improvements.

The above was achieved with the researcher's strategy to develop and implement changes in an evolutionary manner with employee acceptance, collaboration and participation based on positive leadership, Kaizen, Emotional Intelligence, Spiritual

Intelligence and using the Appreciative Inquiry methodology. The manual stock recording systems evolved from computer-aided stock control systems to systems with functionalities similar to materials requirement planning (MRP), manufacturing resource planning (MRPII) and enterprise resource planning (ERP) with just-in-time (JIT) purchasing to reduce production downtimes and inventory costs.

8.5 ERP/II CHANGE STRATEGIES

8.5.1 People Strategy

The people strategy that the researcher took was in establishing positive collaborative relationships with a wide range of managers and employees to understand their roles and difficulties. Dialogues based on the principles of Appreciative Inquiry enabled him to become aware of how they were coping along with their recommendations for improvements. Awareness of current difficulties, their recommendations together with awareness of organisational resources enabled the researcher to develop and implement practical systems to address the needs of both employees and management.

The active collaboration of the production and press shop managers as the “Local Change Leaders” helped develop acceptance.

To gain management and employee trust, the researcher developed and implemented systems that made their work easier, simpler and less error prone. A lot of effort was made in designing front ends that did not intimidate the employees. Rather than expect

employees to perform less mistakes, the systems included elaborate error trapping routines. Major causes of uncertainty were reduced by enabling employees to understand and participate in the change initiatives. When employees understand and experience personal benefits, they accept, collaborate and participate in the change initiative.

8.5.2 Capital Strategy

The capital strategy is to minimize investments until the financial value of change initiatives may be evaluated. The researcher first developed his proposals using his personal microcomputer. Later when management and employees realised the benefits, Birmingham University's minicomputer was used to develop a production version of the researcher's proposal. After financial and production benefits were attained, it was relatively easy to justify a dedicated system to be installed at CB.

This strategy also relates to developing employees who add value as they gain better understanding of the change initiative.

It also made it easier to secure management approval for significant financial investments by illustrating the benefits using low cost prototypes.

The researcher engaged in one-to-one relationships with a majority of managers and employees, throughout CB, to help develop the "value" of the human capital that is more important than systems for business corporate success.

8.5.3 Information Strategy

The information systems at CB soon became irrelevant to current needs because they had not evolved to address changing needs. Hence the researcher's information strategy was first to ensure that relevant information systems were in place. Manual systems were first implemented before automating them with cost effective standalone IT systems. Integration of the systems later led to using the information to improve organisational productivity and employee working conditions.

Integration of the systems led to the evolution of the researcher's systems from stock control to become similar to MRP, MRPII and ERP with JIT purchasing type systems with up-to-date business information.

8.5.4 Experience Strategy

Direct involvement of senior managers and employees from different departments in CB in the change initiative that spanned 3 years led to their personal understanding and acceptance. Collaboration led to their sharing of personal skills and experiences in in-house BPR-type activities.

8.5.5 Opportunity Strategy

The researcher's change initiatives at CB, an organisation that has traditionally been plagued by employee disputes is testimony of the success of the researcher's

opportunity strategy in providing positive opportunities for the majority of managers and employees to improve their working experiences for the benefit of self and others in the organisation. The change initiatives resulted in reduced effort, stress and uncertainty due to better understanding and teamwork.

8.5.6 Crisis Strategy

Positive employee collaboration, personal understandings and experiencing the benefits helped remove or reduce the perception of crisis situations that often led to fear, doubts and anxieties in the minds of both employees and management.

The crisis strategy was to avoid excluding anyone from the change initiatives because their immediate reactions would have been to create crisis situations.

An important crisis strategy practiced by the researcher has been to avoid excluding anyone from his change initiatives.

8.5.7 Result / Reward Strategy

By the end of the case study in 1982, the researcher's results/reward strategy was successful in reducing inventory holding costs by £ 1.22 million.

The success of the project was featured on television and three newspapers articles when the chief executive, Sir Michael Edwards, came to the CB plant for a personal

presentation of the successful outcome of the collaboration between CB and Warwick University's Teaching Company Scheme in 1982.

From the testimonial of the manager involved in the case study that ended in 1982, his fond memories of the change initiative in 2010 is ample testimony of the value of enabling managers and employees to collaborate and engage in positive relationships based on the principles of positive leadership, Kaizen, emotional intelligence, spiritual intelligence and appreciative inquiry.

No financial rewards were offered or expected by the employees. The improved working relationships, working conditions and organisational efficiency were the valued results/rewards of the change initiative.

8.6 CHAPTER OVERVIEW

Case study CB evolved from manual stock recording and microcomputer-based stock control systems to progressively become similar to MRP, MRPII and ERP with JIT purchasing systems with active management and employee collaborations.

Unlike most ERP systems that relate to improvements in transactional processing, this case study achieved success by complementing systems integration with engaging a wide cross section of the employees in collaborative in-house BPR activities, to create value for both themselves (working conditions) and the organisation (financial savings).

Integrated technological systems facilitated improved means of recording information. In this case study, the efforts of the researcher to establish collaborative management and employee relationships across the organisation led to effective use of information.

Over the three year period, the case study at CB was successful in nurturing a culture of positive management and employee collaboration to acquire and share new skills and to collectively enable CB to reduce its annual inventory holding cost by £ 1.2 million per annum.

The next case study is the third longitudinal case study undertaken by the researcher that spanned 14 years from 1996 to 2009 when he took voluntary redundancy.

Chapter Nine

CASE STUDY C –Further Education College

The highest reward from your working is not what you get for it but what you become by it

Sydney Harris [122]

9.1 INTRODUCTION

This case study related to change management initiatives, by the researcher, in a Further Education and Sixth Form College in London, referred to as CC¹.

In 1996, the researcher commenced on a contract assignment to evaluate college funding that the college was entitled to claim and generate the relevant funding claims in accordance to the Further Education Funding Council's (FEFC) funding methodology that came into effect in 1994. This contract led to his employment.

This research reviewed three different projects at CC because of the longitudinal period of 14 years from 1996 to 2009. The researcher reflects upon his strategies to improve the College Information Systems (CIS), train employees and develop an informal and organisational culture based on positive leadership, Kaizen, emotional intelligence, spiritual intelligence and appreciative inquiry.

¹ Actual name is withheld to comply with Data Protection legislation

9.2 PROJECT ONE – FE FUNDING COUNCIL

9.2.1 Barriers to Change

A significant barrier to change experienced in project one was the general lack of communication between management and employees roles that undermined their understandings of the funding methodology. Though employee relationships were generally friendly and informal, departmental barriers led to limited sharing of relevant information.

The researcher even experienced barriers in obtaining essential and fundamental financial information about the funding methodology from the college finance department that was readily available from the FEFC over the phone.

Lack of on-going staff training and inadequate procedural documentations were identified as some of the other barriers to change.

9.2.2 Case Study Descriptions

Between 1994 and 2002, CC was funded by the Further Education Funding Council (FEFC), which implemented a radically new funding methodology in 1994. This was later replaced by the Learning Skills Council (LSC) funding methodology in 2002/2003. Before 1994, college funding had been based on student headcounts while

the new funding methodology was based on a whole range of student learning and relationship information such as the students' personal and academic profiles, their annual academic progress and final attainments together with specialist academic and support services provided to students by the college.

This new FEFC funding methodology required elaborate enterprise-wide computer-aided systems to capture the information needed to generate those funding claims. A total of four fully validated and externally audited funding claims had to be submitted, within stipulated time periods, for each academic year. Without these returns, FEFC funding would not be released to the colleges.

It was a methodology to ensure equality and consistency in the way all further education colleges in the UK are funded. It also enforced enterprise-wide college management systems to identify functional inefficiencies within the college.

The FEFC funding methodology was resisted by colleges because it required significant changes in the way most colleges had traditionally been managed. The resistances were mainly due to insufficient efforts made to enable the college managers and employees to understand the need and benefits of the new change initiative. The FEFC made available the financial resources needed to implement the systems but trivial attention was paid to preparing the managers and employees involved.

The college's Oracle-based Further Education Management Information (FEMIS) system, with insufficient error trapping routines to ensure data integrity of the FEFC-coded information, resulted in the student funding returns not passing the stringent

FEFC validation checks. The use of incorrect FEFC codes resulted in the student records not generating the funding units that determined the FEFC funding.

The college's IT staffs were unable to generate the funding returns because the new funding methodology assumed positive collaboration amongst all teaching and support staff. It was a methodology meant for business users. It was not meant to be a transactional processing exercise by the IT department.

In 1996 the only IT staff who had been trained to generate the FEFC funding claims in CC had left the college without having trained anyone to replace him or documenting the procedures for generating those claims. Most managers and employees were not aware of the FEFC funding methodology.

The departmental barriers in CC indirectly prevented enterprise-wide employee collaboration that was needed to generate these funding claims.

No other factors or projects were undertaken simultaneously either at managerial or support levels or by consultants, students or contractors that may have impacted on improvements.

No measurements of improvements were made. The qualitative benefits were the submission of accurate and fully audited funding claims on schedule, four times per year. The testimonial from the manager in charge is the only qualitative measure of the improvements.

Following the “Kaizen” approach, the researcher developed and implemented systems in small discrete phases for continual improvements. These phases were small enough for users to understand. This led to their acceptance, collaboration and participation in the development, implementation and usage stages. Subsequent phases were built upon the success of previous phases.

Phase 1 of Project

The researcher’s first effort was to gradually try and change the organisational culture at CC by developing collaborative relationships between support employees across departmental barriers. One of the first things he did was to begin a coffee club that led to some collaborative activities, at least in making coffee for colleagues. This strategy enabled him to understand their work and needs whilst sharing, with them, the knowledge he had acquired of the FEFC Funding Methodology and the FEMIS system.

The coffee club was so successful that the college extended it to include all administration staff. Coffee and tea making facilities were made available in the kitchen for the benefit of all staff. The kitchen became a nice area to meet informally.

Informal training and information sharing was established throughout the college. The fact that he was initially a contractor was helpful in establishing cross functional relationships because he was not restricted by the traditional departmental barriers and procedures at CC.

As employees gained better understandings of the funding methodology, it became easier for them to ensure that their current work activities conformed to the requirements of the new funding methodology. Employee collaboration across departmental functions naturally took place as they shared essential information.

For example, when a student has special needs or required child care services, the new methodology required relevant codes and information to be recorded along with their academic information for funding purposes. Hence special needs staff, child care staff and academic staff needed to collaborate with support and IT staff to ensure consistency and a total perspective of the student's relationship with the college.

Phase 2 of Project

After establishing collaborative management and employee relationships at CC, the second phase involved performing a virtual 100% "Stock Take" to ensure that all students were accurately recorded on the college's FEMIS system. This exercise identified significant numbers of college students who were not recorded in the FEMIS database and consequently not attracting FEFC funding. Once these student records were re-instated, there was substantial increase in CC's funding claims.

Phase 3 of Project

The third phase was to develop several database query scripts to interrogate the student database and generate exception reports of student records whose data did not conform to the FEFC Funding Methodology. These exception reports were the basis for registry

employees to correct the records, with sound audit trails, to ensure data integrity of the student database. As the funding claims were based on the correct use of relevant FEFC codes, significant additional increase in funding claims were made.

Phase 4 of Project

The fourth phase was to implement and document the relevant systems to generate the FEFC funding claims on schedule to avoid delays in receiving the FEFC funding. This included informal training of relevant employees.

Phase 5 of Project

The fifth phase represented efforts to ensure that the student records generated by the FEMIS system and the funding units generated by the FEFC software were complete and accurate. The researcher identified several software bugs in both the college's FEMIS system and the FEFC's validation software that either excluded or reduced funding claims. Addressing these software bugs led to increased funding claims.

Phase 6 of Project

The sixth phase was focused on maximizing the funding claims by restructuring the college courses to ensure optimal funding to further improve the college's funding claims. This phase required the positive collaboration of finance, teaching and support employees.

Phase 7 of Project

The seventh phase was to address past mistakes that had led to the under claiming in the 1994/95 and 1995/96 academic years when employee and management understandings of the funding methodology were minimal. With the benefit of acquired knowledge of the funding methodology, the enterprise-wide systems and the database interrogation scripts to ensure data integrity, the researcher identified the significant mistakes that had been made in the previous two years, as regards their funding claims.

By re-submitting fully audited funding claims for the previous two years, the researcher enabled the college to reclaim more than £ 8 million.

Phase 8 of Project

The eighth phase was to initiate in-house business process reengineering (BPR) activities to implement elaborate data integrity systems and changing employee working procedures to ensure that similar mistakes do not recur in future.

9.2.3 Case Study Attainments

As system developments and employee collaborations continuously evolved to resolve negative situations, management and employees effectively acquired relevant knowledge to use and manage the systems more effectively. It was their improved understandings that led to improvements in the quality of their work.

It was observed that as employees understood the implications of their activities upon the employees in the other functions within the college, they were motivated to avoid creating difficulties for others. This relates to people's Emotional Intelligence (EQ).

Also, as employees become aware of the financial implications of their mistakes, it was again their realisation that led to transformations to become more focused in their work.

The researcher learnt about the FEFC methodology and needs of the college by inquiring and listening to management and employees. This relates to the practical application of the Appreciative Inquiry (AI) methodology by the researcher.

The researcher continuously developed enterprise-wide integrated IT systems to help staff improve the way they worked. The aim and objective was to reduce mundane and repetitive transactional processing activities. This was an evolutionary process that continuously extended its reach in the college.

He nurtured an organisational culture of positive collaborative staff relationships in the college to compliment his efforts in implementing enterprise-wide systems. In the 14 years, although the traditional departmental and functional barriers still remains in the

college, the researcher had endeavoured to use informal means to enter into collaborative relationships to overcome restrictive barriers.

In hierarchical organisational structures, there is the top down control which is outdated and not appropriate at present times of constant change. As organisations grow, senior management tend to lose awareness of what the rest of the "trivial employees" do to actually sustain the organisation.

Hence the researcher focused his attention on assisting the "trivial employees" to raise their achievements. The collective result is that these "trivial employees" developed the organisational culture, with the benefit of relevant systems and understandings, to enable the college to grow from strength to strength.

His success in managing the FEFC funding methodology required both the development and implementation of various enterprise-wide integrated systems and motivating positive collaborative staff relationships to achieve the following:

- Collaborate with most staff to generate accurate, fully audited and on schedule funding claims in the format required by the FEFC between 1996 and 2002.
- Address past mistakes made to reclaim about £ 8 million for the 1994/95 and 1995/96 academic years.
- Informally train most support staffs to understand and ensure that their efforts conformed to the FEFC's rigid funding methodology.
- Develop and implement several systems to reduce manual effort and ensure data integrity of the student database to ensure that the past mistakes are not repeated.

- Commence Business Process Reengineering initiatives in data capture and improve related management of activities such as child care facilities and additional support.

In 2002/03, when the new LSC funding methodology replaced the FEFC funding methodology, the change did not present the difficulties experienced in 1996 because management and employees had the relevant knowledge, understandings, collaborated and had gained the relevant IT skills.

Success was due to the direct collaborative relationship between more than 100 employees in different departments and roles to attain the “total approach” in people relationships required by enterprise-wide systems to address needs of users.

9.3 PROJECT TWO – PURCHASE REQUISITION

9.3.1 Barriers to Change

The fact that the CC made no attempts to continuously review and improve its business processes led to its in-house Purchase Requisition (PR) system becoming unable to cope with current needs. The college had expanded significantly in terms of student numbers, staff and geographically separated college buildings. The manual paper-based systems were unable to cope with the new demands for speed and accuracy.

9.3.2 Case Study Description

In 2004, the researcher was assigned the task of addressing the inadequacies of the college's paper based PR system.

The procedure involved the use of a multi-copy, NCR pre-printed PR form that members of staff (originators) filled out by hand before passing them to their managers for approval and authorization. The PR form, once authorized, was forwarded by internal post to the college's Central Purchasing and Contracts (CPC) section for further processing.

At CPC, after manually checking the PRs for correct authorization and expenditure codes and that the procurement was justified, the contents of the PRs were manually re-typed into the college's Finance system – SUN Microsystems Accounting (SUN).

Besides the loss of some PRs in transit, time delay and duplication of manual effort with its extra cost implications, a major cause of errors was the inability of CPC staff to accurately read the contents of the PRs and re-type the same information into the SUN system. Often these errors led to wrong items being ordered.

Although staff themselves kept a copy of the PR, it was not feasible for CPC to confirm that they had actually received the PR form through the internal post, although once received and processed, a copy of the requisition stating the official purchase order is returned to the originator / manager by the internal post. Again the receipt of such by the originators could not be guaranteed.

When errors on the PR forms were noticed by CPC staff prior to processing, the PR was returned by internal post to either the originator / manager for amendment. This obviously created significant delays in processing the PR.

By 2004 due to the rapid expansion of CC, with more than 500 staff in three different geographical sites, the current system was proving to be expensive and error prone with unacceptable time delay between completing a PR and receipt by CPC. Significant processing cost was incurred together with the delays and difficulties caused by data input errors.

No other factors or projects were undertaken simultaneously either at managerial or support levels or by consultants, students or contractors that may have impacted on improvements.

No measurements of improvements were made. The qualitative benefits were the accurate and instant submission of purchase requisition in the college. The testimonial from the manager in charge is the only qualitative measure of the improvements.

Following the “Kaizen” approach, the researcher developed and implemented systems in small discrete phases for continual improvements. These phases were small enough for users to understand. This led to their acceptance, collaboration and participation in the development, implementation and usage stages. Subsequent phases were built upon the success of previous phases.

Phase 1 of Project

The first phase of the researcher’s change initiative was to acquire an in-depth understanding of the current procedures, employee’s preferences and their difficulties. Due to the wide reach of the system involving the college’s more than 500 staff, an important strategy was to seek agreement with the manager of CPC that he would assume the role of change leader and become the medium between the researcher and users.

The change leader, the CPC manager, with his awareness and understanding of the specific needs of the PR system from the points of view of Finance and all college staff, was in a better position to create followers of the proposed change. Rather than the researcher listening to conflicting user requirements, it was agreed that the replacement system would be specified only by the change leader and that he would take full

ownership of the system in terms of training users, daily usage, documentation and maintenance.

Phase 2 of Project

The researcher used his technical skills to develop a relevant system, using current college resources. With collaborative relationships with the change leader, a relevant solution evolved using the researcher's strategy to continuously improve upon the prototype until it was acceptable to go live. The solution decided upon and developed with the change leader was:

The solution

Since all staff had access to a PC with Microsoft Office, Outlook and Exchange, the most cost effective and practical solution was to develop a PR system, in the form of a Microsoft Excel template, with the following main functionalities:

- Directly type in the PR requirements on to the template.
- Automatically check for data integrity.
- Generate a unique internal requisition number for tracking purposes.
- Save a copy on the originator's PC.
- Email the partially complete PR to relevant the manager for approval and authorisation.

- The manager enters relevant additional information, check data integrity, and electronically authorise the PR, with the use of pin numbers, before emailing to a senior for further authority, if required.
- The manager then emails the PR directly to CPC in the Finance department.
- If the manager had emailed to his/her senior for further approval, the relevant senior would enter their relevant information and check data integrity before authorizing and emailing the PR directly to CPC.
- When the PR is received at CPC, the relevant information is entered and the entire PR is automatically checked for data integrity before being appended to a file in the relevant folder in MS Exchange, in the format required for direct import into SUN.
- At daily intervals, SUN will import the contents of the PR file for onward processing.

9.3.3 Case Study Attainments

Using Object-Oriented methodology in his software developments, the researcher ensured that his system was flexible and did not compel employees to any fixed procedures.

The proof of the success of the PR system is its successful use, since 2005, because it performed exactly what the employees' needed. Other similar systems for Human Resource have been implemented with minor modifications.

The other equally important strategy of the researcher was to enter into a collaborative relationship with the change leader to develop and test the PR system. The change leader, by collaborating closely with the researcher enabled the researcher to develop a solution that was relevant, useful and acceptable to all employees. The collaboration enabled the researcher to understand the intricacies and practical constraints that had to be addressed in developing a solution that was both practical and relevant to the needs of the Finance Department and college employees.

The CPC manager, who assumed the role of the change leader, did not need any formal training because he learnt as the system evolved. This made him the natural trainer to train new users. The in-house change leader was in a better position to establish the collaborative relationships required for successful outcome. By assuming ownership of the project, his sense of personal pride further motivated him to successfully address the many barriers to change that were encountered.

This new PR system has been approved for use by the college's internal auditors who have confirmed that it satisfies the college's procurement procedures in respect to the security of authorizations. It has also received favorable comments from staff who find it easier to use, eliminated common arithmetical errors and removed the difficulties associated with illegible handwriting. It certainly improved processing time for originators and CPC staff.

In the words of the change leader, *“The development and creation of the in-house PR system allows CPC to offer faster processing of purchase requisitions without the problems associated with handwritten requisitions, which in turn means quicker delivery of goods. It also proved the effectiveness of interdepartmental cooperation, without which the system would not have been developed, or would it be the success that it has proved to be.”*

Success in this case study was achieved by establishing positive direct relationships with the change leader and about 10 other employees in Finance and IT departments to develop a user-friendly system that was user-friendly and relevant to the needs of about 500 college employees. The nature of relationships was focused on both learning from them whilst also informally training them to assume ownership of the change initiative.

Achievement in this project was that the researcher was able to enable 10 employees, who made personal efforts to directly collaborate in the change initiatives, to assume ownership and become responsible for maintenance and user training.

9.4 PROJECT THREE – CUSTOMER RELATIONSHIP MANAGEMENT

9.4.1 Barriers to Change

The barriers to change in project three in CC may have been due to the lack of positive management and employee collaboration across functional teams to understand and share relevant information and resources.

9.4.2 Case Study Description

The researcher was not involved in the initial specifications, development or implementation of the Microsoft (MS) Customer Relationship Management (CRM) system for this third project at CC.

In 2005, the researcher was assigned to this project that had stalled for a variety of reasons. One of the reasons may have been lack of understanding of the importance and needs for customer relationships and use of vendor software that was inappropriate for Employment Solutions (ES) needs.

As an ES provider, funded by the Department of Works and Pensions (DWP), CC had implemented 8 discrete functional teams for this provision.

In 2003, to encourage ES providers to develop positive relationships with local employers, the DWP provided funds and made it mandatory for all ES providers to establish and maintain records of their relationships with local employers.

9.4.3 Case Study Attainment

Without clear understandings of the reasons and benefits of maintaining customer relationships with local employers, a decision was made to invest the DWP funds on a system provided by a software vendor who gave the assurance that they had customized the MS CRM software for use by academic establishments. Nothing was stated but it was assumed that the customisation addressed ES needs.

There were no attainments because without having specified their needs to the software vendor, the “customized version” of MS CRM installed did not address any of the vital needs of ES. The software may have been appropriate for a manufacturer or trading organisation but not a college.

Furthermore version 1.0 of MS CRM software, with its many software bugs, presented significant difficulties.

To make matters worse, there was intense rivalry between the 8 functional teams within the ES department.

9.4. Case Study Current Situation

Even after having been fairly successful in implementing computer-aided systems since 1976, the researcher was relatively unsuccessful in this project.

Although the researcher had established close and collaborative relationship with managers and staff at the college, he was unable to change the attitudes of senior management.

The college had installed the necessary computing resources and updated the CRM software at great cost but lack of collaboration between functional teams within ES may be one of the reasons for failure to attain the benefits of the CRM system.

9.5 ERPII CHANGE STRATEGIES

9.5.1 People Strategy

In the first project, the FEFC funding methodology was a new system and yet no staff at CC had received training on it. The manuals were available in CC but these were not made available to the relevant employees. In situations where there is total confusion due to the lack of understanding and access to relevant information, the employees would be to unable to address the situations they faced. This was the situation experienced by employees in 1996.

The new FEFC funding methodology required both enterprise-wide IT systems and positive collaborative management and employee relationships in the college. But college management was unaware of this fundamental need.

The researcher's strategy was to address the needs of employees to understand the new funding methodology by making them aware how their roles fitted into the FEFC funding methodology. The personal understanding of the FEFC funding methodology and the financial implications of incorrect data motivated employees to make effort to collaborate and address the situation.

Using EQ principles and the AI methodology, the success of this project partially may be attributed to efforts made to involve most managers and employees. Their involvement led to their personal pride for their contributions.

In the second project, establishing a collaborative relationship with the manager who had established close relationships with the majority of employees at CC made it possible for the researcher to understand user and organisational needs without actually establishing direct relationships with the enormous number of employees.

The failure of the third project was primarily due to the lack of commitment by the local change leaders. There was also minimal collaboration between the different functional teams to share information and good practices. The use of vendor software, without ample collaborations to develop the specifications, meant that the vendor was unable to provide the right level of customizations required.

9.5.2 Capital Strategy

Significant improvements are possible by being creative in change management initiatives with available capital resources. In the 14 years that the researcher had been at CC, he had never suggested the purchase of any new IT equipment, software or recruit additional staff.

The first project enabled the college to reclaim about £ 8 million of under funding which is testimony of the value of enterprise-wide employee collaboration with in-house BPR efforts.

In the second project, the researcher used available systems to avoid any capital investments. It was used by almost 500 staff distributed over three different locations. The researcher implemented systems that met the needs of employees.

In the third project, significant financial cost was incurred in purchasing a vendor CRM solution that was not suitable for its intended purpose. This was due to a combination of not using the right technology and not nurturing a corporate culture of management and employee collaboration.

9.5.3 Information Strategy

The information strategy is of significant importance in any change initiative.

In the first project, the information strategy employed by the researcher was to conduct a virtually 100% stock take of the college's enrolment forms and FEMIS student database and make relevant corrections to ensure data integrity. Data integrity and quality of information is a vital requirement of the information strategy.

Systems and procedures were developed and implemented to maintain data integrity of the student database in CC. But it was even more important to ensure that the employees clearly understood the importance and value of the information they compiled and recorded in the information systems.

9.5.4 Experience Strategy

By involving employees at every stage of the change initiative, the researcher's experience strategy at CC was to ensure that a majority of managers and employees,

throughout the college, gained personal experiences by their active involvement in the change initiatives.

Organisational culture is determined by the number of employees, especially those lower down the hierarchical structure, who are enabled to acquire personal experiences of the change initiative. This requires the use of positive leadership, Kaizen, emotional intelligence, spiritual intelligence and appreciative inquiry to motivate acceptance, collaborate and participate in business process reengineering activities for continuous improvements.

The first two projects succeeded because they addressed this vital people need. The factor that may have contributed to the failure of the third project is lack of initiatives to enable its managers and employees to experience the benefits of the change initiatives.

9.5.5 Opportunity Strategy

The opportunity strategy at CC was focused on attaining the usual opportunities to reduce costs and manual effort.

The more important opportunity attained was to empower more managers and employees to experience the benefits of new opportunities to add value or avoid crisis situations.

9.5.6 Crisis Strategy

The crisis strategy at CC was focused in eliminating barriers to information sharing by encouraging informal employee collaborations across departmental functions to improve the quality of employee relationships and making them self-realise the benefits of information sharing. Crisis situations are often due to inappropriate communications.

9.5.7 Result / Reward Strategy

Some factors that may have led to the success of the first project at CC were the researcher's strategy in enabling employees to gain a better understanding of the requirements of their roles in relation to the other employees. This was facilitated by the use of EQ and AI to first motivate sharing of relevant business information.

In the second project at CC, employees experienced the practical benefits of collaborative employee relationships, made possible with enterprise-wide integrated IT systems. From the employee point of view, the user friendly system developed by the researcher facilitated the reduction of time, errors and manual effort needed.

The failure of the third project may be due to the lack of employee collaboration, not understanding their related roles and the absence of in-house BPR efforts to create value for employees and the organisation. The CRM initiative has significant potential for both the employees and college in front office activities but it was not used appropriately.

9.6 CHAPTER OVERVIEW

In the first project, enterprise-wide information strategy and positive collaborative employee relationships enabled CC to recover more than £ 8 million in previously under claimed FEFC funding. It was collaboration amongst managers and employees that may have contributed to reclaiming the £ 8 million under funding.

The second project at CC is a Collaborative Business Solution (CBS) relating to the management of the college's purchase requisition. It addressed a significant need, with minimal capital investment, to improve efficiency. This is an example of successful collaboration between all college staff and external suppliers whilst integrating different proprietary IT systems. It also emphasizes the need for simple object oriented systems.

The third project briefly illustrates a significant cause of failures when implementing change management initiatives. Change initiatives where insufficient effort is made to thoroughly understand the needs of the application, organisation, and employees involved in change initiatives may be more likely to fail. Failures or limited success of the third project also stress the superior probability of success of in-house software developments over vendor software in addressing specific business needs.

The next chapter discusses this research's longitudinal case studies taking a combination of biographical and reflective approaches.

Chapter Ten

DISCUSSION

Love broadens vision, love enables creativity, and love expands intelligence

Humberto Maturana [146]

10.1 INTRODUCTION

Since 1976 when the researcher first began developing computer-aided systems for businesses, there have been continual technological advancements and management evolutions. People's relationships, their needs, fears, anxiety, hopes and expectations, however, remain the same.

This chapter focuses discussions and analysis upon identifying employee-centric generative strategies that the researcher employed to complement the technological systems he developed and implemented for successful outcomes in his business process reengineering initiatives.

In the case studies, the researcher had assumed the role of participant observer who also got involved in business activities to address immediate problematic situations. It was the researcher's efforts to address problematic situations that led to his acceptance by managers and employees throughout the organisation. He became the 'link' between

manager and employees. This contributed to the success of his efforts to facilitate better management-employee collaborations.

No significant resistance to the researcher's change management initiatives were experienced because of the collaborations that the researcher facilitated. His efforts to develop and implement change in small phases to address immediate problems resulted in immediate benefits for both management and employees. The small and continual improvement phases meant that the changes were well understood by management and employees. This strategy contributed to securing user acceptance, collaboration and participation in the change initiatives. By enabling users to assume ownership of the change, the researcher's efforts in continuous improvements were welcomed by management and employee.

In the case studies, no other factors or projects undertaken simultaneously either at managerial or support levels or by consultants, students or contactors may have impacted on improvements because they were personal initiatives of the researcher alone. But the real reason for the improvements was due to the efforts made by users to accept, collaborate and participate in the change initiatives for continuous improvements to the business processes.

The changes or improvements in the approach taken by the researcher since 1976 evolved to become more people-centric. The researcher's focus changed to develop the human capital by enabling employees to take ownership of change initiatives for the benefit of themselves and organisation.

10.2 How each strategy was derived

Each strategy was derived using the reflective method [26] on the experiences gained from the multiple case studies relating to a wide range of businesses over a longitudinal time period from 1976 to 2009. Triangulations with participant interviews were used to overcome possible replication difficulties and researcher bias.

The reflective method [26] was informed by current research and the researcher's personal knowledge and experiences on positive leadership, Kaizen, emotional intelligence, spiritual intelligence and appreciative inquiry that were all reviewed in the methodology chapter.

The researcher's reflections indicated that when change systems are developed and implemented using management strategies to understand the employees and become aware of the specific market dynamics that they are involved in, significant improvements are possible with minimal financial investments.

The management strategies are not just people-centric. They were derived to assist management to effectively use their **people, capital, information** and **experiences** to take advantage of new business **opportunities** whilst managing risks/**crisis** to attain the **results/rewards/benefits** of business process reengineering for continuous improvements.

The people strategy proved to be the most important because for business solutions to be practical, relevant and successful, employee must first accept, collaborate and participate in the business process reengineering initiatives for continual improvements.

For each case study reviewed, the sections on 'Barriers to Change'; 'Case Study Description'; and 'Case Study Attainments' provided some means of deriving strategies that may have contributed to the success or failure of the projects.

The strategies were categorized and labeled to be generative. Generative strategies need to be relatively easy to understand, remember and associate which may contribute towards developing the corporate culture.

In the practical application of the seven generative management strategies, a flexible approach to interpreting the meaning of each strategy is essential if they are to be applicable to the majority of businesses.

The seven ERPII strategies may be practiced individually or in combinations. They may be practiced in any sequence to suit the immediate needs of the business/organisation.

Furthermore, the strategic management strategies proposed complements, not replaces, other practices such as positive leadership, Kaizen, emotional intelligence, spiritual intelligence and appreciative inquiry.

10.3 ERPII CHANGE STRATEGIES

Enterprise-wide systems, like Enterprise Resource Planning (ERP), are essential in today's business modals but since they are tools for the employees, this research introduces Employee Relationship Planning (ERPII), with its generative management strategies, to motivate employees to use these tools for successful outcomes.

ERPII generative management strategies proposed in this research were built upon a set of employee-centric relationship strategies, identified from the case studies, as being contributory towards reducing the significant failure rates of enterprise-wide change management initiatives, especially the ERP systems where its failure rates are well documented. The strategies are relevant to all change initiatives in any organisation, within any sector or country, because it relates to planning practical ways of fostering positive collaborative management - employee relationships in the workplace.

ERPII's framework of seven generative employee-centric management strategies seek to improve employee's working experiences and secure their acceptance, collaboration and participation in business process reengineering initiatives for continuous improvements.

Being a framework, the use of the seven generative strategies is dependent upon the prevailing needs of the business, its employees, relationships, and the specific conditions that are all subject to continual changes. It is a framework of practical, simple and flexible strategies derived from knowledge, understandings and real-life experiences of people dynamics observed in the three case studies.

10.3.1 People Strategy

The people strategy is the fundamental strategy of ERP II because success and failures of most change initiative is dependent upon its employees' attitudes to accept and their efforts to acquire the new knowledge and skills required in accommodating and sustaining the positive momentum of change. This strategy emphasises the need to be flexible and tolerant in establishing harmony in employee relationships to reap the power of unity/teamwork. The need for motivating employees using emotional intelligence (EQ) principles and the appreciative inquiry (AI) methodology are significant because the people strategy relates to changing people's attitudes and understanding.

The underperformances and failures of innovative technologies and business processes are often due to the inability of employees to understand the initiative and change their ingrained habits to embrace the new initiatives.

The researcher's people strategy in the case studies had been to complement his efforts in the design, development and implementation of innovative technologies and change management initiatives with relevant employee-centric strategies to prepare/groom the employees to develop the organisational culture required for change. But organisational culture cannot be created. It develops and evolves as employees gain understandings to accept, collaborate and participate by sharing their specialties to attain a common goal.

Organisational culture may be positive, neutral or negative. Negative organisational cultures may eventually lead to the organisation's demise. Neutral cultural change means that the employees may be doing what they have always done. Benefits experienced, if any,

may be trivial. It is positive cultural change, as a result of establishing collaborative employee relationships throughout the organisation that may lead to continuous improvements in working conditions and corporate productivity.

Employees are equal in terms of their physical needs but are totally different in relation to their thoughts that influence their attitudes. To enable individual employees to develop their personal and positive change orientated attitudes, the researcher's strategy had been to develop close relationships to know and understand most of them before developing systems with their active collaboration. Informal one-to-one training and on-the-job guidance were paced to ensure that each employee acquired personal understandings and experiences to actively participate in the change initiatives. When change is developed and implemented with active employee involvement, the researcher noted that the changes are generally accepted with excitement because of the benefits of the change. Otherwise, the change initiatives would create experiences of fear and self doubts in the minds of the employees. This may lead to resistances.

An important strategy the researcher adopted was to enable the employees to "own" the change initiatives to create their sense of personal pride. For this, he made efforts to ensure that by listening to their experiences, his implementations represented tangible benefits for the employees and that they clearly understood the needs and objectives of the change initiative.

It was observed that personal understanding and tangible benefits led to positive personal attitudes towards the change. Lack of understanding may be prime causes for

uncertainties experienced in workplaces, leading to experiences of stress caused by fears, worries and self doubt.

The case studies indicated that when employee / management relationships are based on the foundations of Emotional Intelligence (EQ) and the Appreciative Inquiry (AI) methodologies, employees self-realise the need to make personal efforts to change their attitudes and accommodate changes for positive outcomes.

Self realisation is a powerful motivator of change because it leads to changing individual attitudes in ways that are relevant and acceptable to each individual. But the major challenges are in motivating them to acquire the relevant knowledge and experiences needed for the change.

To motivate employees to acquire personal knowledge and experiences, the researcher's strategy had been to avoid delegating work to employees unless they fully understood and were personally motivated to undertake the task. No employee was compelled to change. It was teachings, guidance and co-operation that motivated employees to acquire relevant knowledge to develop their personal skills and experiences.

In typical hierarchical organisational structures, it is important to develop harmonious relationships with all employees, especially with those lower down the hierarchical structures that represent the "undercurrents" of organisational activities. These employees, being the majority, influence organisational attitudes and culture. Individually, their roles may be trivial but collectively, they perform vital business activities of the organisation. This makes their contributions vital for the organisation.

To address the needs of the “trivial” many in the case studies, the researcher’s strategy had been to work closely with employees lower down the organisational structures to understand the prevailing organisational culture before making efforts to develop relevant culture change required for successful outcomes. By actively interacting with the majority, the researcher was successful in developing positive culture change. Acceptance of his change initiatives led to collaboration and active participation in the researcher’s proposals for business process reengineering initiatives for continuous improvements.

The researcher paid special attention to ensure that his change initiatives were acceptable to the majority of managers and employees, flexible, manageable and required minimal effort. As individual needs are unique, the researcher entered into close relationships with as many individuals, as was practical, to understand and generally guide them accordingly.

In interactions with the employees, listening to the majority of the employees about their concerns and aspirations for the change was more important than telling them what was expected from them. By doing this, the researcher became aware of immediate problematic situations.

Since employees in the lower roles of organisations perform the bulk of transactional processing workloads, the major proportion of mistakes comes from this category. Due to their “trivial” roles, they are often powerless to use their experiences to change current systems and procedures.

Hence, in all the case studies, the researcher's efforts were focused on listening to the concerns and aspirations of the majority before seeking management approval to develop and implement solutions, with their active collaboration, to address immediate needs.

An important employee-centric strategy of the researcher had been to minimise departmental barriers to share relevant business information. It was observed that though departments are necessary for functional work, departmental barriers effectively made business users intellectually "blind" of the situations within which organisations operated. When information is withheld, especially financial information, the employees may not be aware of the business or financial implications of their actions or lack of actions.

The researcher's experience indicated that people's perception of change played a vital role on the success or failure of change initiatives. This was because their perception influenced their acceptance, collaboration and participation in the change initiative. Some perceptions noted by the researcher may have been influenced by the following 'points of view':

- Individual Point of View;
- Relationship Point of View;
- Management Point of View; and
- Situational Point of View.

10.3.1.1 Individual Point of View

The researcher observed that there would always be those who are eager to collaborate and participate in change initiatives. These individuals would collaborate for the benefit of self, team and organisation due to their awareness of the benefits of change. For successful change outcomes, change leaders, managers and implementers should identify and empower these individuals to take an active part in the change initiative.

Another category of individuals, probably due to personal ego/arrogance, may resist any change that undermined their self perceived expectations. Attempts to disrupt their ingrained habits may be resisted. The researcher noted that the more senior these individuals were, the more severe their resistance upon the change initiative. The causes for their resistances may not be the change initiative but their personal attitudes. Since this category of individuals can exert powerful negative influences upon the majority, an important people strategy was to include rather than exclude this category of individuals.

One way of including this category of individuals in change initiatives was by focusing upon their positive qualities to motivate their collaboration. Any attempts to exclude these individuals may lead even more powerful resistances.

Then there were those individuals who are generally disheartened in their personal, family or organisational lives. The barriers to change presented by this category of individuals may not have been due to the change initiative but their personal situations. This group of individuals would experience mental tension whenever going from the

known and familiar to the unknown and unfamiliar. These individuals needed to be won over by being merciful, compassionate, kind and generally enabling them to overcome their immediate personal uncertainty, fears and anxieties. They needed to be assisted to understand the change initiative.

Since barriers to change were normally due to individuals of the second and third categories, the researcher's strategies had been to focus on addressing the needs of these two categories of employees. These individuals needed to be assisted to replace their feelings of arrogance, fear and hopelessness that nothing good can happen from the change initiatives.

They needed to be assisted to understand the current situation and enabled to experience personal benefits. Often, it was their carelessness, pre-occupation with short term difficulties and not realizing the long term value of the change initiatives that led to their resistances.

The researcher's people strategy had been to develop the multiple skills of being flexible, relaxed, energetic, and fearless in responding to the different individual relationships. Often just the mere act of appreciating an individual's positive qualities had led to their personal motivations to collaborate and participate to offer the benefits of their specialties in the change initiative.

10.3.1.2 Relationship Point of View

From the relationship point of view, it had always been important to be creative in performing actions that benefited as many individuals as possible because positive change is a team effort.

Positive activities such as training, guidance, support, supervision and inclusion in collaborative activities lead to mutual trust and the feelings of being respected and appreciated for their contributions towards the success of the change initiative. Everyone's contribution in the change initiative is vital, just as anyone can become a barrier to change.

10.3.1.3 Management Point of View

From the management point of view, any attempts to enforce any form of control over individuals may be resisted because it represented loss of personal freedom. The two common profiles of individuals in the case studies who required appropriate management strategies were:

- Those who are aware of valid reasons why the proposals may not lead to success;
- Those who do not understand the change proposals.

The researcher's strategy had always been to listen to learn from the first category and use appropriate and creative means to teach and guide the second category.

10.3.1.4 Situational Point of View

From the situational point of view, individual's fear was noted to be due to uncertainty which may be one of the main reasons for resistances to change. Since fears were often due to feelings of personal uncertainties, the researcher's strategy had been to avoid sharing problems with others.

A problem shared may be a problem halved if shared with someone who is able to assist. Otherwise, a problem shared tended to become a problem doubled due to the creation of uncertainty in the minds of both.

Experience informed that as the nature of the barriers become known; the practical methods to overcome them also become evident. Collaborative relationships enable individual specialties to be pooled together to reduce personal fears, overcome barriers, contribute and participate in business process reengineering for continuous improvements.

Situations that created uncertainties leading to resistances in the case studies were:

- Not training employees progressively to enable them to become aware of the need for change and make personal efforts to accommodate change.
- Not involving and enabling the majority of employees, in the change initiatives, to understand the change and contribute to in-house BPR activities.
- Not ensuring that the majority of employees experienced personal benefits.

- Making employees redundant as a result of new change management initiatives.
Changes were essential but employees with old skills and experiences were needed to sustain new changes.
- Limited efforts made by IT staff to understand employees needs and that of the organisation.

10.3.2 Capital Strategy

The aim and objective of the capital strategy is to reduce the capital cost of change initiatives to make it easier to secure management approval for change proposals. Investments in the people, facilities and resources are the “capital” strategies in change initiatives.

Employees represent the most significant organisational capital as evidenced by typical organisational payroll costs that represent more than 50% of overall cost. For this reason, efforts to empower employees with knowledge, guidance and facilities to enable them to express their specialties may be rewarded by improvements in organisational productivity. Continuous training may develop value of “human” capital. Capital spent on imposing controls and barriers upon employees are counter productive because it may restrict employee creativity.

All the three case studies firmly established the fact that in-house business process reengineering (BPR) and software development are relatively cheaper capital strategy for systems development, operation and maintenance. It is also an excellent means of encouraging employee collaboration. The wider the scope of employee collaboration, the more value is added by BPR activities.

The researcher also noted from the case studies that mature organisations require the evolutionary approach in BPR initiatives to ensure that the capital strategy is sustainable. From an employee-centric point of view, evolutionary change is more

appropriate for changing employees' deeply ingrained negative and unproductive habitual tendencies.

From the financial capital point of view, the capital strategy must seek to amplify the good and right investments and business activities. Capital investments must always be based upon proven returns to proceed from strength to strength. Capital investments to be avoided are those designed to put right that which had gone wrong unless it relates to addressing some of the causes of those negative situations.

10.3.3 Information Strategy

In all the case studies, ensuring availability of complete, accurate and dynamically up-to-date information were key to responding appropriately to ever changing external and internal business needs.

Experience of the researcher from the three case studies indicated that when employees are made aware of relevant business information, they become aware of the changing threats and opportunities. This understanding may motivate them to make personal efforts to positively collaborate and participate in in-house business process reengineering (BPR) activities for continuous improvements.

In the case studies, efforts were made by the researcher to ensure data integrity of existing information systems by conducting 100% "stock checks". When IT systems became available, they were used to improve the speed and accuracy of information recording.

After relevant information systems were in place, it became possible to naturally shift the employee focus from recording information to using information in in-house BPR activities for continuous improvements.

The researcher noted that there was minimal value in historical information because whatever may have happened is a past event that cannot be changed, recreated or addressed. BPR activities must be based on accurate information of current resources, opportunities and constraints. For this, employees must have access to and be able to share relevant, up-to-date and enterprise-wide information to ensure that they are aware of the “Wider Picture” within which their organisation was operating.

Most of the “Emergency” situations encountered in the case studies were due to the lack of relevant and dynamically accurate business information. A common reason for the lack of information may have been the lack of effective communication between management and the employees. Management understanding of the needs and fears of their employees may only be possible with direct communications, wherever possible. Likewise, employees may become aware of the organisational goals, mission, obstacles, barriers, risks, threats and opportunities only when there is adequate communication with management to share relevant information.

The information strategy was not a concern in case study CA which was a small to medium enterprise (SME). But, as organisations expand and incorporate logical business functions, it becomes essential that relevant information strategies are put in place to minimise the creation of “islands” of knowledge, due to departmental barriers, which reduces the responsiveness of organisations. This was observed in case studies CB and CC.

The information strategy used by the researcher in the three case studies was to nurture positive management-employee collaboration throughout the organisation to share relevant information. This was vital for researcher's developments that evolved to become enterprise-wide systems. The benefits of enterprise-wide systems in reducing cost and increasing revenue were dependent upon the information strategy.

10.3.4 Experience Strategy

Personal experiences of employees added value to organisations and displaced fear and anxiety by making the change initiatives less intimidating. Experience also led to employees becoming more active in collaborating and participating in-house business process reengineering (BPR) activities for continuous improvements (CI).

In all the case studies, the researcher's change initiatives were focused upon enabling the majority of employees to experience personal benefits whilst overcoming fears, uncertainties and personal doubts in their ability to sustain that change. This was achieved by involving employees in all stages of the change initiative.

Care was taken to ensure that no employee was forced or compelled to accommodate change without first understanding the change or experiencing the practical benefits of their efforts. Employees must experience the value of change initiatives in improving the way they work if they are to be personally motivated to collaborate and participate in BPR activities for CI.

The researcher's experience strategies in all the case studies had been to share his knowledge, in informal situations, with a wide range of employees to enable them to develop their personal understandings and experiences. To make it easier for the employees to gain personal experiences, the researcher's strategies had been to develop sophisticated IT systems with simple front ends that emulated the manual tasks that most of the employees were aware of.

To reduce the learning curve, most front ends were designed to look and "feel" similar to the manual systems they replaced. This was the benefit of in-house software developments.

To ensure that employees experienced long-term benefits of the change initiatives, the researcher continuously improved his systems to include new functionalities or automate other labour intensive processing efforts. Informal employee consultation and inclusion in all stages of the change initiatives ensured that employees contributed their experiences and were always aware of the aim and objectives of the change initiatives. This may have contributed to their acceptance, collaboration and participation in business process reengineering activities for continuous improvements.

Employee training was paced to be relevant to each of them, without being intimidating. From an organisational point of view, this may prove to be impossible but for success, it is of vital importance. When employees do not understand, their natural tendency would be to resist. When employees resist, change initiatives fail. In all the case studies, the researcher was successful because his implementations were designed to cater for the specific needs of employees.

The researcher's experience indicated that in-house software development and on-the-job training contributed positively towards enabling employees to gain their personal experiences, at their unique paces, to actively contribute towards the developments.

The most significant aspect of the researcher's experience strategy was to establish informal relationships with a wide range of managers and employees to reduce their feelings of uncertainty, fear and anxiety in the early stages of the change initiative because experiences may not be gained in environments where fear, worry, doubts and uncertainty were prevalent.

10.3.5 Opportunity Strategy

Opportunity relates to attaining benefits for the employees, and as a consequence, for the organisation. Change management systems, to be perceived to be successful, must enable employees to attain the benefits of emerging opportunities. For this reason, the researcher's opportunity strategies were focused upon ensuring that change always resulted in some form of tangible benefit for employees and the organisation.

Besides financial opportunities, that cannot always be satisfied, employees' desire was the opportunity to experience peace of mind and establish balance in their lives. It was observed by the researcher that only when employees are presented with opportunities to improve their work without impinging upon their personal and social needs, will they be committed to collaborate and participate in BPR activities for continuous improvements (CI). BPR activities that seek to only improve organisational productivity are unlikely to be sustained by employees in the long term.

In all three case studies, the researcher, by developing his systems with active employee collaboration created new opportunities for them to reduce clerical mistakes and tedious repetitive tasks that directly provided opportunities for them to actively contribute their personal expertise in the in-house BPR activities for CI.

10.3.6 Crisis Strategy

Most organisations would be exposed to continuously changing internal and external influences that may present crisis situations that must be addressed. The crisis strategy employed by the researcher was to accept crisis situations with the same zeal and enthusiasm as attainments and opportunities are celebrated. This is the attitude that would enable employees to perceive difficult situations as learning opportunities to progress further.

In all the case studies, the researcher confined himself to identifying and implementing solutions to reduce the causes of recurring crisis situations. He avoided dealing with the symptoms. The researcher noted that once the causes of crisis situation became known, the solutions to deal with the symptoms also became obvious. Collaborations with management and employees often led to the identifying and solving the causes of crisis situations.

It was noted from the case studies that when individual employees become personally disheartened, they may become the causes of crisis situations. The crisis strategy used by the researcher was to help these employees to realize their unique specialties, their

vital abilities, and disregard the trivial mistakes they may have made. This often motivated a change in their attitudes.

The researcher also noted that when employees resisted changes, it was often due to their personal crisis. Doubts and worries in accommodating the change were often perceived as a crisis situation. Positive collaborative activities enabled these employees to share their experiences and overcome these fears and doubts.

A powerful negative management and employee attitude that the researcher sought to avoid in management-employee relationships is being blinded by personal ego and arrogance that often led to accusations and blames rather than activities to resolve crisis situations. Ordinary situations often escalated to become problems when management and employees engaged in negative activities of blaming and criticizing each other.

The two types common of crisis situations identified in the case studies were:

- Random crisis situations that cannot be anticipated.

For these, the crisis strategy was to avoid over-indulgence in trying to eradicate sources of random crisis because it is a wasted effort. The strategy adopted was to tolerate them and address them with current resources.

- Recurring crisis situations.

When similar crisis situations recurred in the business, it implied lack of effective management of a known variable. Hence the crisis strategy was to motivate employees to engage in BPR activities to identify and address causes

of the recurring crisis situations. Collaborative efforts by employees, in identifying the causes and developing practical solutions proved to be the best way forward in addressing this second type of crisis.

The Kaizen strategy of continual improvement by the identification and elimination of the root causes of crisis situations as well as being creative in devising new and better ways of working, with positive employee collaboration, is an example of this strategy.

Crisis situations experienced in the case studies often led to the identification of irrelevant activities that drained organisational resources. These initiated BPR activities to ‘weed out’ those irrelevant, obsolete and wasteful organisational activities.

Positive collaboration between management and employees in all the case studies contributed in overcoming most crisis situations. By spending less time on reacting to negative situations, it became possible to invest more time in BPR activities for continuous improvements.

10.3.7 Result / Reward Strategy

All three case studies led to the researcher’s realisation that everything management and employees did was motivated by their desire for positive attainments. Hence his result/reward strategy sought to address this need because without this focus, change initiatives may gradually lose momentum.

None of the researcher's results/rewards strategy in the three case studies was related to securing financial incentives for employees. It was noted that most employees appreciated the efforts made by the researcher to improve their work and enable them to assume ownership of the change systems.

Employees' main desires were to be creative, be valued and experience freedom. For this, the researcher noted that change initiatives must avoid creating peacelessness in the minds of the employees. Strategies that created more restful periods to enable employees to reflect and become more creative were always appreciated in the case studies.

Efforts made by the researcher to reduce mundane, repetitive and time consuming tasks represented significant and tangible rewards for employees. This may have motivated employees to collaborate and actively participate in in-house BPR activities for continuous improvements.

Enabling employees to take ownership of the change initiatives always led to the sense of personal accomplishment and pride that spurred them towards ensuring that the change initiatives are successful and continuously improved.

Establishing collaborative relationships, based on the principles of Emotional Intelligence (EQ) and the Appreciative Inquiry (AI) methodology were valued by management and employees because these nurtured a happy workforce. The researcher's experience from the case studies informed that it is the happy workforce that would be more productive and effective in responding to changes for mutual benefit.

For the organisations, the researcher's result/reward strategy in all the case studies was related to securing financial savings. This was not an important motivator for change in case study CA that was a Small to Medium Enterprise (SME). Collaboration led to personal experiences of the benefits of changes.

For large organisations, financial savings and revenue increases were the only means used to measure success. This may probably be due to management of large organisations not being able to appreciate the efforts made and benefits experienced by employees at grass root levels.

10.4 CASE STUDY COMPARISON TABLE

No	Description	Case A	Case B	Case C
1	Researcher role in the Case Study	Placement	Placement	Employee
	Systems used			
2	Action research methodology	Y	Y	Y
3	Agile S/W development methodology	Y	Y	Y
4	In-house S/W Development	Y	Y	Y
5	EQ and AI Methodology	Y	Y	Y
6	Evolutionary Change Management	Y	Y	Y
7	Longitudinal Period of Case Study	7 years	3 years	14 years
	Business Related			
8	Reduce Departmental Barriers	Y	Y	Y
9	Financial savings achieved	Y	Y	Y
10	Business Process Re-Engineering	Y	Y	Y
11	Enterprise-wide systems integration	Y	Y	Y
	Employee Related			
12	Direct Collaborative Relationship	About 20	About 40	About 100
13	Indirect Collaborative Relationship	All	All	All
14	Positive Management involvement	Y	Y	Y
15	Direct Employee Benefits	Y	Y	Y
16	Employee Ownership of change	Y	Y	Y
17	New personnel requirement	None	None	None
	Change Management			
18	Systems Proposal and Specification	Researcher	Researcher	Researcher
19	Software Development	Researcher	Researcher	Researcher
20	Implementer	Researcher	Researcher	Researcher
21	Trainer	Researcher	Researcher	Researcher
22	Documentation by	Researcher	Researcher	Researcher
23	Successor Trained by	Researcher	Researcher	Researcher
24	Change Sponsor	Director	Director	Principal
25	Change Leader	Managers	Managers	Managers
26	Involvement of IT Professionals	None	None	None
27	Barriers to Change	None	BL Systems	IT Staff
	Attainments			
28	Capital Expenditure	< £ 5000	< £ 10000	< £ 10000
29	Financial Savings	Unknown	£ 1.2 M	£ 8.0 M
30	Current Status	New Systems after Takeover	New Systems after Takeover	New Systems for expansion

Table 10.1 Case Study Comparison

10.5 ERPII SUMMARY

10.5.1 People Strategy

- Listen to learn from employees without indulging in gossip/blaming activities.
- Prepare employees with training and guidance based on the principles of EQ and AI
- Change initiatives must be beneficial to management and employees.
- Enable employees to acquire personal knowledge, skills and experiences at their own pace.
- Motivate flexible, tolerant and collaborative relationships.
- Initiate evolutionary change initiatives at a pace that is relevant to the employees.
- Implement flexible change initiatives that suit employees' different and unique needs.
- Reduce mundane, repetitive tasks.
- Seek to magnify the employees' positive specialities.
- Establish harmonious employee relationships across departmental barriers.
- Address the needs of the trivial many that represent the undercurrents of organisational change.
- Empower employees to accommodate change through self-realisation of the need for change.

10.5.2 Capital Strategy

- Add value to the people capital with training and guidance.
- Minimise drastic financial investments.
- Minimise drastic changes to work routines.
- Make employees aware of the “value” and consequences of their efforts.
- Minimise controls and barriers to information sharing.
- Attempt incremental in-house business process reengineering for continuous improvements based on past successes.
- Minimise resources spent in fire-fighting activities.
- Implement in-house software development, where possible.

10.5.3 Information Strategy

- Empower employees with complete, accurate and dynamically up-to-date information.
- Minimise manual effort in maintaining historical information.
- Enable employees to be aware of the “Total Picture” within which the organisation is operating.
- Improve communication between management and employees by motivating management-employee collaboration. This may not always be possible in the larger organisations.
- Avoid the creation of “islands” of information due to departmental barriers.
- Information strategy must evolve with business changes.
- Change emphasis from recording to using information.

10.5.4 Experience Strategy

- Enable employees to gain personal experiences to dispel fear, uncertainty and anxiety.
- Minimise situations that lead to experiences of uncertainty, fear and anxiety.
- Enable employees to gain experiences through self-development.
- Encourage sharing of knowledge, skills and experiences.
- Attempt BPR with the active participation of management and employees.
- Implement on-the-job training to develop relevant skills.
- Enable positive collaboration with inclusion of most employees.
- Enable employees to acquire experience at their own pace.
- Use in-house software development to incorporate all the employees' experiences.

10.5.5 Opportunity Strategy

- Ensure employees experience personal benefits.
- Implement changes that may lead to personal peace of mind and happiness in relationships with ample time for self reflections.
- Enable the majority of employees to participate in BPR to improve their work procedures.
- Ensure that change leads to new and better ways of working.
- Magnify previous attainments.
- Make the place of work collaborative to share knowledge, skills and experiences.

10.5.6 Crisis Strategy

- Assist employees from becoming personally disheartened by crisis situations.
- Respond to crisis as a learning opportunity to address current 'negative' situations.
- Avoid reacting to trivial situations and escalating them into significant difficulties.
- Accept crisis situations with the same zeal and enthusiasm that attainments and opportunities are celebrated.
- Avoid the temptation to blame others, criticise, gossip, worry or develop fears and personal doubts in crisis situations.
- Avoid pre-occupation with random crisis situations that are unlikely to recur.
- Avoid the consequences of recurring crisis situations by addressing their causes.
- Use crisis situations to identify Business Process Reengineering (BPR) activities for Continuous Improvements (CI) to eliminate inefficient and obsolete business processes.

Result / Reward Strategy

- Ensure that employees attain/perceive some form of positive attainment.
- Ensure that current needs of the employees are addressed.
- Employees need to be rewarded in some way. Rewards need not always be financial incentives. To perceive being rewarded may be just as important as the reward.
- Enable employees to be creative, be valued and experience freedom from bondages that may restrict personal freedom.
- Enable employees to experience newness in their daily routine using appropriate means.
- Management of employees must avoid creating peacelessness in the minds of employees.
- Enable employees to assume ownership of change initiatives for personal pride and the sense of personal accomplishment.
- Nurture positive collaborative relationships to create a 'happy' workforce.

Table 10.2 summarises the testimonials received following the change leader practitioner surveys.

DISCUSSION : CHAPTER TEN 181

Arumugam Gunasegaran					Employee Relationship Planning (ERP II)			Change Leader Questionnaire Analysis				
Project	Period	Success/ Failure	In- House Change Leader	Management Collaboration	Employee Collaboration	Access to Relevant Information	Project Scope Enterprise/ Department	IT Application	IT Development	Involvement of Employees in Systems Development?	Need EQ AI?	Used EQ AI?
CB	1979- 1882	Success	Yes	Yes	Yes	Yes	Enterprise	Integrated Manufacturing Management System (ERP)	In-House	Yes	Yes	Yes
CC - 1	1996- 2002	Success	Yes	Yes	Yes	Yes	Enterprise	Further Education Funding Council (FEFC)	In-House	Yes	Yes	Yes
CC - 2	2004- 2006	Success	Yes	Yes	Yes	Yes	Enterprise	Purchase Requisition	In-House	Yes	Yes	Yes
CC - 3	2005- 2009	Failure	No	No	No	No	Department	Microsoft CRM Customised	Vendor	No	Yes	No
Table 10.2 - Change Leader Practioner Survey Analysis												

10.6 CHAPTER OVERVIEW

Items 2 to 4 in the case study comparison table 10.1 illustrate the relevance of using the Action Research Methodology, Agile Software Development Methodology and In-House Software Developments in successful change management initiatives.

Item 5 indicates the researcher's use of the Emotional Intelligence principles and the Appreciative Inquiry methodology in engaging management and employees to self-realise the need and benefits of collaborative relationships and make personal efforts for successful outcomes.

People-centric change needs to be evolutionally to ensure that users understand the change initiative. This is illustrated by item 6. Since change management involves changing peoples' attitudes, item 7 confirms that evolutionary people-centric change is a slow and continuous process that may take several years to show results.

Items 8 to 11 illustrate the fact that change management initiatives must seek to reduce departmental barriers that may restrict information sharing if financial savings are to be achieved. Other requirements for business related savings are to include business process re-engineering and enterprise-wide systems integration in change management initiatives.

The need for positive collaborative employee relationships are illustrated by items 12 to 16 where research indicated that the majority of employees need to be involved, both directly or indirectly, with management support to enable managers and employees to experience benefits and assume ownership of the change.

The three case studies did not require new personnel. Existing employees may be developed with the skills needed to accommodate and excel in change initiatives. The three case studies are testimony of the potentiality of developing employees in change initiatives.

The researcher's experience indicated that where change initiatives are performed by one individual, the passion of that person and the positive people relationships he/she develops at the workplace are contributory factors for the success of the change initiatives. Items 18 to 23 indicate that this is a practical reality when change implementers seek to acquire multiple skills required to address the cross functional needs of change initiatives.

Items 24 and 25 illustrate the need for relevant change sponsors and leaders in senior roles to support and create credibility of the change initiative. Items 26 to 27 show that that successful change is based on business user initiatives rather than just that of IT professionals. The researcher's experience indicated that IT professionals seldom are equipped with the business knowledge needed to build business solutions. This may compel them to be reluctant to lead in business change management initiatives that they do not understand.

Item 28 in the table illustrates the trivial financial cost of evolutionary in-house change management initiatives that seek to attain the power of employee unity. Item 29 lists the substantial financial savings that are possible in change management initiatives where effort is made to understand the needs of the employees and proactively involve them in the development, implementation and use of innovative enterprise-wide systems.

Table 10.2 summarises the testimonials received following the change leader practitioner survey.

Chapter Eleven

CONCLUSION

The proposed Employee Relationship Planning (ERP II) strategies are a framework of generative management strategies that may address some causes for continued high failure rates of corporate change management initiatives.

ERP II generative management strategies may facilitate development of organisational cultures where management enable **employees** to become aware of relevant **capital, information, experience, opportunity** and **crisis** situations to attain the **result/reward** of their collaboration and participation in business process reengineering (BPR) activities for continuous improvements (CI).

The **people strategy** is for management to be flexible, appreciative, positive, adaptive and supportive in enabling positive collaborative relationships throughout enterprises. This strategy may lead to corporate cultures where employees accept, collaborate and actively participate in BPR activities for CI.

The **capital strategy** is for management to become creative in valuing employees, the most important business resource for competitive advantage. By discovering the value of employees, this strategy may lead to enabling employees to become the best they can be through education, training, guidance and inclusion in BPR activities for CI.

The **information strategy** is for management to communicate and listen to employees and discover potential changes to take advantage of emerging opportunities and solutions to address crisis situations based on their personal experiences. This strategy seeks to make available relevant information to make employees aware of the ‘wider picture’ within which their business operates. Awareness may lead to employee acceptance, collaboration and participation in BPR activities for CI.

The **experience strategy** is for management to enable employees to acquire and contribute their knowledge, experiences and unique skills in BPR activities for CI.

The **opportunity strategy** is for management to enable employees to be creative in recognising and taking advantage of emerging opportunities when they collaborate and participate in BPR activities for CI.

The **crisis strategy** is for management to avoid wasting time and resources over trivial and random crisis situations. The aim is to enable employees to become creative in collaborating and participating in BPR activities to address and/or avoid similar obstacles/barriers/problems.

The **result/reward strategy** is for management to recognise and/or provide opportunities for employees to attain relevant results/rewards for their collaboration and participation in BPR activities for CI. This strategy may lead to employee self motivation to make efforts in BPR activities for CI and attain their desired destiny. This strategy may also lead to the appreciation of change.

The case studies indicated that the generative ERP II management strategies may be applicable to most organisations irrespective of business sector, size or location. Fine tuning the strategies may be needed to cater for unique needs of each organisation.

Experiences of the researcher indicates that the generative ERP II management strategies may be more applicable to small and medium enterprises (SME) where it may be easier to develop the organisational culture needed to motivate management-employee collaboration.

To attain positive outcomes, the generative ERP II management strategies may require the following prerequisites:

- Management and employee collaboration throughout the organisation.
- Employees have access to a wide range of relevant summary information to make them aware of emerging opportunities and potential crisis situations.
- In-house change leader(s)/manager(s) assigned to facilitate BPR for CI.
- Where possible, bespoke IT software is developed in-house with involvement of business users at all stages of the development life cycle.

The generative ERP II management strategies were developed using current approaches in positive leadership, emotional intelligence, spiritual intelligence, appreciative inquiry and Kaizen. Table 11.1 summarises how the generative ERP II management strategies may be mapped to these current approaches to illustrate that the use of these generative ERP II management strategies may facilitate practical application of these evolving management approaches.

A Gunasegaran		Employee Relationship Planning (ERP II)					ERP Mapping to Positive Leadership, EQ, SQ, AI and Kaizen	
ERP II Strategies	ERP II Relates to	Positive Leadership	Emotional Intelligence	Spiritual Intelligence	Appreciative Inquiry	Kaizen		
People Strategy	Employees	Flexible Adaptable Collaborate Supportive	Emotional Literacy Group dynamics Self Awareness	Interconnectedness	Appreciative Positive	Team effort in BPR		
Capital Strategy	Finance Resources	Value people	Insight Competitive Advantage	Discover Values	The best that can be	Continuous Improvement with resources		
Information Strategy	Information Technology	Communicate Listen	Communications	Awakening Awareness	Discovery	Continuous Improvement with knowledge		
Experience Strategy	Training Skills	Envision Energise	Navigate Emotions	Seeing Afresh	Design	Continuous Improvement with skills		
Opportunity Strategy	Market	Enable	Noble Goals	Creative Recognise Value	Dream Build on successes	Continuous Improvement to attain benefits		
Crisis Strategy	Situation	See Positive aspects	Consequential Handling Stress Conflict resolution	Being in the present (Not concerned with past or future)	Design	Continuous Improvement to avoid problems		
Result/Reward Strategy	Motivation	Empower	Empathy	Living Change Passing it on	Destiny	Continuous Improvement in people relationship		

Table 11.1 ERP II Mapping to Positive Leadership, EQ, SQ, AI and Kaizen

Chapter Twelve

RECOMMENDATIONS FOR FURTHER WORK

12.1 INTRODUCTION

The aim of this chapter is to make recommendations for further work.

Though ERP II strategies are applicable to most organisations, minor fine tuning is recommended to adapt ERP II strategies for the specific needs of organisations to make the strategies more relevant.

12.2 Fine Tuning ERP II Strategies

The following are recommendations for further work related to fine tuning ERP II strategies for the following types of use:

- Use by self-employed;
- Use by small to medium enterprises (SME);
- Use by large private sector organisations;
- Use by public sector organisations;
- Use by multi national corporations; and
- Use by academic institutions.

12.3 Pre-Requisites of ERP II Strategies

The following are recommendations for further work related to developing the supporting systems that may lead to successful implementation of ERP II strategies:

- Developing qualities and qualifications of effective change leaders/managers.
- Developing management-employee relationships that may facilitate implementation of ERP II strategies.
- Developing corporate information procedures that may facilitate information sharing for business process reengineering activities for continuous improvements.

Testimonials

(removed for copyright reasons)

- Case Study A
- Case Study B
- Case Study CC – 1
- Case Study CC – 2
- Case Study CC – 3

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